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VIEW

OF THE

RUSSIAN EMPIRE

DURING THE REIGN OF

CATHARINE THE SECOND,

AND TO THE

CLOSE OF THE PRESENT CENTURY.

By WILLIAM TOOKE, F. R. S.

MEMBER OF THE IMPERIAL ACADEMY OF SCIENCES AND OF THE FREE ECONOMICAL SOCIETY AT ST. PETERSBURG.

IN THREE VOLUMES.

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ADVERTISEMENT.

THE Ruſſian Empire, which in various reſpects now fixes the attention of Europe, has for ſeveral years been the ſubject of a multitude of inveſtigations and writings, by which the knowledge of that country is conſiderably improved and enlarged. The care which Catharine the ſecond, from her firſt acceſſion to the throne, and during the whole of her reign, devoted to the cultivation of this knowledge, has been attended with ſo much ſucceſs, that Ruſſia, which, prior to the year 1762, was a ſort of terra incognita in our part of the globe, is now in poſſeſſion of a very conſiderable ſtore of materials, from which the preſent ſtate of this remarkable country may be illuſtrated and deſcribed. The firſt and moſt important ſtep to the elucidation of the natural and moral condition of Ruſſia was the appointment of the academicians of St. Peterſburg to travel for the purpoſe of exploring its qualities in both theſe reſpects; and their journals ſtill form the baſis of all that we know with certainty of the internal ſtate of

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this extenfive empire. Thefe important difcoveries aſſiſted the zeal of ſome induſtrious foreigners, who either in the country itſelf, or by correſpondence and connections, collected uſeful materials, and communicated the reſult of their labours to the public. By the introduction of the governments, which, beſides the beneficial effects they produced on the political adminiſtration of the empire, greatly aſſiſted the knowledge of the country; by the admeaſurement and ſurvey of the diſtricts aſſigned them, which facilitated the conſtruction of ſpecial charts on a more accurate plan; by the more adequate enumeration of the people, &c. but, above all, by the wiſe and enlightened publicity with which it was allowed to treat of theſe matters, this knowledge acquired ſuch a powerful acceſſion, that the idea of a ſyſtematical digeſt of all the neceſſary materials was no longer to be conſidered as a vain ſpeculation. Buſching, at firſt, and after him Meſſrs. Schlœtzer, Herrmann, Hupel, and laſtly Storch, drew up their topographies and ſtatiſtics of the empire. Still, however, the voluminous journals of the academicians lay unopened to this country, and the travels of Pallas, Guldenſtædt, Georgi, Lepechin, Falk, the Gmelins, Fiſcher, and others were in England known only by the occaſional

mention

mention of their extraordinary value, with deſerved encomiums on the talents and labours of their authors, in the reports of our countrymen on their return from a tranſient viſit to St. Peterſburg.

Having paſſed the greater part of the long reign of the late empreſs in her dominions, favoured for many years with the friendſhip and intimacy of two ſucceſſive directors of the academy, with free acceſs to its libraries and collections, and being perſonally acquainted with ſeveral of the travellers themſelves, I preſume to lay before the public this View of the Ruſſian Empire, in which I have faithfully followed the authors abovementioned, and delivered my vouchers wherever it was neceſſary, as the reader will generally find at the foot of the pages.

I have beſtowed much care and pains in the compilation of this work from the learned writers abovementioned and other authentic ſources; and this is all the merit to which I pretend; yet would it be the height of arrogance to expect that it can be free from faults; theſe muſt be ſubmitted to the indulgence of the reader: however, amidſt the great variety of matter, and the ſeveral authors in various languages conſulted, I am far more apprehenſive that ſome things ſhould, in ſpite of all my diligence, be found repeated, than that any thing of conſequence

is omitted. Fine flowing periods and the finiſhed graces of diction are certainly not to be expected in a work of this nature; and if I have not failed in rendering it both intereſting and entertaining I ſhall be perfectly ſatisfied.

Ruſſia, an empire but little known or regarded in the laſt century, at the opening of the preſent made her appearance all at once among the ſtates of Europe; and, after a ſhort trial of her powers, became the umpire and the arbitreſs of the North. The whole ſyſtem of Europe took another form; the arctic eagle extended her influence to the regions of the Adriatic and the banks of the Tagus, while the lightning of her eye ſtruck terror into the receſſes of mount Caucaſus and made the Helleſpont tremble. The arts of Europe were tranſplanted and bloomed both on the ſhores of the Neva and thoſe of the Irtyſh; a new world was opened to commerce, and the ſciences, the manners, the luxury, the virtues, and the vices of weſtern Europe have found their way into the deſerts of oriental Aſia, and to the inhoſpitable coaſts of the Frozen-ocean. The æra of theſe remarkable phenomena was the commencement of the eighteenth century *.

Arrived

* In the year 1697 Peter the Great began his firſt journey into foreign countries. In 1699 he concluded the armiſtice with the Porte, by which he acquired Azof, and was

Arrived now at the extreme verge of that period, it muſt be curious and inſtructive to look back and compare the two epochas together. To conſider what Ruſſia was at the beginning of this century, to ſee what the ſucceſſors of Peter have built on the foundation laid by that great and aſpiring genius, what progreſs has been ſince made by civilization, and what impreſſion the rapid and violent introduction of foreign manners, the ſettlement of ſo many thouſand foreigners, and the intercourſe with foreign nations, have produced.

In order to ſatisfy himſelf on theſe particulars, the reader will here ſee a complete arrangement as far as it goes, of ſtatements drawn from authentic ſources, of facts related by eye witneſſes of what they deliver, men of ſcience ſent out for the expreſs purpoſe of collecting information on the ſtate of the countries they were to viſit, furniſhed on their expedition with every accommodation that could poſſibly be procured, for facilitating their inquiries and freeing their minds from all ſolicitudes about collateral objects of

was enabled to conſtruct a navy on the Euxine. In 1700 the battle of Narva was fought, where the Swedes for the laſt time ſhewed their ſuperiority in diſcipline and the arts of war.

ſecurity and ſubſiſtence. The ſame generous patronage and care was continued to them on their return: they ſat down in eaſe and affluence to commit the reſult of their inquiries to paper; and the ſubſtance of what they relate will be found in the following pages. This is all that ſeems neceſſary for me to ſay; and I humbly conclude in the words of the hiſtorian: "Si in tanta "ſcriptorum turba mea fama in obſcuro ſit; "nobilitate & magnitudine eorum, qui nomini "officient meo, me conſoler."

LONDON,
June 20, 1799.

INTRODUCTION.

ABOUT the middle of the year 1767, Catharine II. conceived the useful project of sending several learned men to travel into the interior of her vast territories, to enable themselves to determine the geographical position of the principal places, to mark their temperature, and to examine into the nature of their soil, their productions, their wealth, as well as the manners and characters of the several people by whom they are inhabited.

A country of such a prodigious extent as the russian empire, must naturally attract the notice of every man who wishes to increase his knowledge, whether it be considered in regard to the astonishing number of tribes and nations by which it is inhabited, the great diversity of climates under which they live, or the almost infinite quantity of natural curiosities with which it abounds. But the greater part of this country is still immersed in the profoundest barbarism,

and almoſt inacceſſible to the inveſtigations of the ordinary traveller. Here vagrant hordes of people, who, entirely addicted to the paſtoral life, roam from place to place, ſhunning the ſocial manners of towns and villages, negligent of agriculture, and leaving uncultivated and almoſt in a deſert-ſtate vaſt tracts of land bleſſed with the moſt favourable ſoil and the moſt happy temperature of ſeaſons: there, peaſants, and even in many places inhabitants of towns, ſlaves to a thouſand prejudices, languiſhing in bondage to the moſt ſtupid ſuperſtitions; brought up, beſides, in the ſevereſt ſervitude, and, being accuſtomed to obey by no other means than blows, are forced to ſubmit to the harſheſt treatment: none of thoſe affectionate admonitions, thoſe prudent and impelling motives, which uſually urge mankind to action, make any impreſſion on their degraded minds; they reluctantly labour the fields of a hard maſter, and ſtudiouſly conceal from his knowledge thoſe riches which ſome accident, ſo deſirable in other countries, ſhould have led them to diſcover; as they would only augment the number of their toils and the heavineſs of their yoke. Hence that careleſs contempt for the treaſures preſented them by Nature, and the neglect of thoſe bounties

ſhe

ſhe laviſhes on them. Hence thoſe immenſe deſerts almoſt totally deſtitute of cultivation, and ſo many towns that are falling to decay.

Peter the Great, of too penetrating a view not to perceive both the evil and its cauſes, took all imaginable pains, and adopted the wiſeſt meaſures to ameliorate the condition of an empire, ſo powerful from numberleſs other circumſtances, to free his ſubjects by gentle degrees from the ſhackles of barbariſm, to diffuſe on all ſides the benign light of arts and ſciences, to diſcover the treaſures concealed in his dominions, and to furniſh agriculture with the remedies and aſſiſtances adapted to its improvement. His travels into ſeveral countries of Europe for the acquiſition of ſuch kinds of knowledge as were moſt applicable to the uſe of his dominions, are ſufficiently known; as well as that in 1717 he honoured the royal academy of ſciences at Paris with his preſence, and expreſſed his deſire the following year to be admitted a member; that he kept up a regular correſpondence with that illuſtrious body, and that he ſent to it, as the firſt eſſay of his ingenious and magnificent enterpriſes, an accurate chart of the Caſpian, which he cauſed to be ſcrupulouſly taken on the ſpot. At the ſame time he fitted out and diſpatched ſeveral men of letters to various

parts

parts of his empire; one of them to make the tour of Ruſſia, and two others to proceed to Kazan and Aſtrakhan, to gain information of every thing of conſequence to be known in thoſe countries. In the year 1719, Daniel Amadeus Meſſerſchmidt, a phyſician of Dantzic, was ſent into Siberia, for the purpoſe of making inquiries into the natural hiſtory of that immenſe province, from which expedition he only returned at the beginning of 1727. This learned man did honour to the choice that had been made of him, by an indefatigable activity, and by the proofs he gave of his profound knowledge, not only in every department of natural hiſtory, but likewiſe in antiquities, as well as in aſtronomy, having carefully determined the elevation of the pole in all the places where he ſtopped.

As the northern regions, particularly thoſe of Siberia, were as yet but little known, and as it was very uncertain whether the extremity of theſe latter might not touch upon America, Peter I. ſent from Archangel two ſhips, with orders to proceed, by the White-ſea and the Northern-ocean, into the Frozen-ocean, where they experienced the ſame diſaſters as had befallen the other veſſels that had gone before them in this attempt; for one of the two was caught

caught by the fields of ice, and diſabled from proceeding any farther; and as no tidings were ever heard of the other, it, in all probability, periſhed.

Peter I. was not diſcouraged by the failure of this undertaking; but he was carried off by death as he was preparing a new expedition; he had given the charge of it to two daniſh captains, Behring and Spangberg, and a Ruſſian named Tſchirikoff, with orders to go to Kamtſhatka, whence they were to ſail for exploring the northernmoſt coaſts of Siberia. The ſorrowful event of the emperor's death made no alteration in theſe diſpoſitions; and the plan was carried into execution, the ſame winter, by the empreſs Catharine, who ſent a ſmall company of literati, provided with a paper of inſtructions, which Peter had framed with his own hand. They returned in 1730, after having penetrated very far towards the north.

The empreſs Anne was deſirous of proſecuting theſe important reſearches ſtill farther, and ordered the erection of a new company, in which Behring was to be employed as captain of the ſhip. Kamtſhatka was again the point of departure for making the principal diſcoveries, with orders to neglect nothing that might ſhed any light on the knowledge of the globe. One

part

part of this ſociety was to navigate the northern ſeas, while the others were to repair by land to Kamtſhatka over Siberia. Theſe latter were to act conformably with the inſtructions of the imperial academy of Peterſburg, and to employ themſelves particularly in aſtronomical obſervations, geometrical operations, and deſcriptions relative to the political and natural hiſtory of the countries through which they were to paſs.

John George Gmelin was one of the chief of thoſe who undertook the journey by land; almoſt always accompanied by profeſſor Muller, who had the care of the hiſtorical part. They reached as far as Yakutſk; where Kraſcheninikof, the aſſiſtant Steller, the painter Berkhan, and the ſtudent Gorlanof, quitted them to go to Kamtſhatka, of which they collected the political and natural hiſtory, as well as that of the department of Okhotſk. M. de l'Iſle de la Groyere likewiſe went thither with ſome land ſurveyors. Afterwards M. Fiſcher was ſent in the department of political hiſtory; he reached very near to the province of Okhotſk, which he left in the deſign of returning *.

* For more particulars the reader is referred to the preface of Mr. J. G. Gmelin to the firſt volume of his travels in Siberia which appeared at Gœttingen 1751. A french tranſlation, or rather abſtract of it, was given by M. de Keralio, Paris 1767.

In

In 1760, M. l'abbé Chappe d'Auteroche was ſent into Ruſſia, by order and at the expence of the king of France, for obſerving at Tobolſk the tranſit of Venus over the ſun: his obſervations, publiſhed with great oſtentation, contain not near ſo much as was expected from that academician; and many of thoſe which he relates had been already long ſince known.

The empreſs Catharine II. was determined to proſecute theſe uſeful inveſtigations, and accordingly gave orders to the academy of ſciences to make choice of a company of able and learned men to travel over different diſtricts of the empire with attention and obſervation. The ſelection of the learned travellers, the helps that were granted them, the excellent inſtructions and advice that were given them, will be a laſting honour to that academy. The very names of a Pallas, a Gmelin, and a Guldenſtædt, already promiſed much. M. Lepechin had likewiſe acquired a reputation by different papers inſerted in the academical collections; and the reſult of the labours of theſe enlightened men has been ſeen in the extenſive utility which they have ſince produced. Very few of the accounts that have been given by travellers contain ſo great a variety of new and important matters. The journals of theſe celebrated ſcholars even furniſh ſuch

ſuch a great quantity of materials entirely new, for the hiſtory of the three kingdoms of nature, for the theory of the earth, for rural œconomy, in ſhort, for ſo many different objects relative to the arts and ſciences, that it would require, according to the judicious remark of M. Bekmann of Gœttingen, whole years and the labour of ſeveral literary men only to put theſe materials in order, and properly to claſs them.

In order to form an accurate idea of the different objects to which our learned travellers were enjoined to direct their obſervations, it will be neceſſary to give an account of the inſtructions delivered to them by the academy at their departure. By theſe they were to make accurate examinations into—1. The nature of the ſoil and that of the waters. 2. The means of putting the deſert places into cultivation. 3. The actual ſtate of agriculture. 4. The moſt common diſeaſes, both of men and cattle; and the methods of healing and preventing them. 5. The breeding of cattle, particularly ſheep, and that of bees and ſilk-worms. 6. The fiſhery and the chace. 7. Minerals and mineral waters. 8. Arts, trades, and objects of induſtry. 9. They muſt alſo apply to the diſcovery of intereſting plants: and, 10. To rectify the poſition of places, to make geographical and meteorological obſervations;

ations; to report all that relates to manners, various cuſtoms, languages, traditions, and antiquities; and mark down exactly whatever they ſhould find remarkable concerning all theſe points.

All theſe different views were fulfilled in a ſuperior manner by theſe gentlemen; and there is no exaggeration in what has been ſaid, that natural hiſtory never at one time obtained ſo great an increaſe of its treaſures, the ineſtimable fruit of the labours of theſe truly uſeful men; and their narratives are become a laſting monument of their zeal, their uncommon talents, and their unwearied activity.

Samuel George Gmelin, phyſician of Tubinguen, began the courſe of his travels June 23, 1768, accompanied by four ſtudents, James Gliutſharef, Stephen Kraſheninikof, Ivan Michailof, and Sergèy Maſlof; having with them an apothecary named Joachim Daniel Luther; Ivan Boriſſof a draftſman; Michael Kotof, a hunter by profeſſion, whoſe buſineſs it was to ſtuff the animals; and a ſufficient eſcort of ſoldiers. He directed his route, on leaving Peterſburg, through Stararuſſa, Valdai, Torjok, and Moſco, towards Voronetch; where he took up his winter-quarters, and whence he afterwards paſſed through Oſtrogoſk, Pavlovſk, Kazanka,

Cimlia and Tſcherkaſk, to Azof. From this laſt place he ſet out, about the middle of Auguſt 1769, to proceed by Tzaritzin to Aſtrakhan; he paſſed the winter in that city, and only quitted it in June 1770; he traverſed, in this laſt half year, in the whole courſe of 1771, and part of 1772, the north of Perſia; viſited Derbent, Baku, Schamaky, Entzili, Peribazar, Ghilan, Mazanderan, returned to Entzili, where he paſſed the winter, and reſumed, in April 1772, the route to Aſtrakhan. The third volume of his journal cloſes with the deſcription of theſe countries. This able traveller was continually obliged to ſtruggle with adverſe events, while traverſing the northern provinces of Perſia; he had eſpecially to contend with ſickneſſes, and the difficulties thrown in his way by the khans of that kingdom; and he is deſerving of the title of a martyr to natural hiſtory, with the greater right, as, after having adorned his life with ſo many labours, he cloſed it under the weight of perſecutions, and in the miſeries of captivity*.

The

* He was ſeized upon, at 90 verſts from Derbent, in the diſtrict of Uſmey-khan, and there actually died in priſon. The empreſs gave a gratification to his widow, after this deplorable event, by granting her one year's pay of the ſalary ſhe had aſſigned to her huſband during his travels, conſiſting of 1600 rubles. If the worthy Gmelin had not undertaken his

ſecond

The greater part of the writings he left behind him were forced, not without great difficulty, from the hands of the barbarians.

PETER SIMON PALLAS, M. D. and profeſſor of natural hiſtory, long famous in that branch of knowledge, took his departure from St. Peterſburg towards the middle of June 1768. In his progreſs he viſited Novgorod, Valdai, Moſco, Vladimir, Kazimof, Murom, Arſamas, the country extending between the Sura and the Volga, and wintered at Simbirſk, of which he examined all the adjacent parts. The 10th of March 1769, he turned off to Samara, Syzran, Orenburg, croſſed the countries watered by the Yaïk, and repaired to Gurief-gorodok, which ſeemed then to be the general rendezvous of our academical travellers. Here he met, among others, the unfortunate profeſſor Lovitz*, who had

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ſecond and unfortunate journey into Perſia, rather as a merchant than as a literary man, and if he had not conſtantly gone by land, he would not eaſily have fallen into the hands of Uſmey-khan.

* M Lovitz loſt his life in a dreadful manner, during the time that the rebels, who produced ſo much confuſion in Ruſſia in the preceding war againſt the Turks, were ravaging he colonies of the evangelical brethren. Our naturaliſt

had juſt eſtabliſhed his obſervatory, his aſſiſtant Ichonodzof, and lieutenant Euler: M. Lepechin was alſo at that time in the neighbourhood of Gurief. M. Pallas employed himſelf, during the whole of his ſtay in this place, in examining the coaſts and the iſles of that part of the Caſpian that lay within his reach. Hence he returned by the ſame road, in order to go, by the way of Orenburg, to Ufa, where he arrived the 2d of October; and after having ſpent there the winter, he ſet out, the 10th of March 1770, for the mountains of Ural, and the province of Iſſet: the 23d of June he reached Ekatarinenburg, where he made his obſervations on the great number of mines that are worked in that diſtrict; he proceeded afterwards to the fortreſs of Tſcheliabinſk, whence, about the middle of December, he took his courſe to Tobolſk. M. Pallas

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was taken at Dobrinka, where he thought himſelf in the greateſt ſafety. A band of theſe rebels dragged him as far as the borders of the Slovla, where their chief had his quarters; and, in the month of Auguſt 1774, he was there firſt impaled alive, and afterwards hanged. The aſſiſtants of Lovitz, Ichonodzof and his ſon, having found means of eſcaping, ſaved all his writings and a part of his inſtruments. Several farther particulars relating to this learned traveller, may be ſeen in Buſching's Wochentliche nachrichten, 1775, p. 56 & ſqq.

had

had ſojourned the greater part of the winter at Tſcheliabinſk, and traverſed and examined, partly by himſelf and partly by his aſſiſtant M. Lepechin, and by profeſſor Falk, almoſt all the government of Orenburg, when this latter alſo came, about the middle of March 1771, followed ſhortly after by his aſſiſtant Georgi, to join him in this town of Tſcheliabinſk. Captain Ritſchkof, who had hardly quitted M. Pallas all the winter, now left him, and ſet out upon another journey.

M. Pallas finally left his winter-quarters at Tſcheliabinſk the 16th of April 1771, directed his courſe by the Omſk, followed the courſe of the Irtyſh, viſited the mines in the environs of Kolyvan, went to the Schlangenberg (or ſerpentine mountains) and to Barnaul; where he found Mr. Falk ſick, who was come from Omſk by the ſteppes or deſerts of Barabin. From Barnaul M. Pallas proceeded to Tomſk, and arrived the 10th of October 1771 at Kraſnoyarſk upon the Yeniſſey, which he had made choice of for his winter-quarters. It was there that the ſtudent Suyef came up to him again, in the month of January 1772; he had made, in the courſe of the laſt ſummer, a journey the length of the Oby towards the Frozen-ocean, and was returned to communicate his obſervations to

M. Pallas, who was again joined, in the month of February, by M. Georgi, who had hitherto ſerved as aſſiſtant to M. Falk, and afterwards by the ſtudents Bykof, Kaſchkaref, and Lebedef, whom M. Falk, forced by the bad ſtate of his health to return, had ſent to M. Pallas.

Our learned traveller left his winter-quarters the 7th of March 1772, to proceed, with M. Georgi and two ſtudents, by Irkutſk to the lake Baikal, whither he had already ſent M. Sokolof in the month of January. After having ſeen the environs of that lake, Selinginſk and Irkutſk, he regained, the 12th of July, the route of Kraſnoyarſk, where he ſet up his winter-quarters, after having viſited the Sayane mountains. In the month of January 1773, they ſet out on their return, in which they took the way of Tomſk, Tara on the Irtyſh, Kazan, Sarapul, Yaitſkoi-gorodok, Aſtrakhan, and through the country that borders the Sarpa to Tzaritzin, where he met again M. Sokolof, whom he had ſent to viſit the ſteppe or deſert of Kuman. After having wintered at Tzaritzin, and made ſeveral excurſions from that city towards the Volga, he returned at length by Moſco to St. Peterſburg, where he arrived the 30th of June 1774.

We

We ſee, by this ſhort ſketch of M. Pallas's travels, that he went over a great part of the ſame countries which the firſt, third, and fourth volumes of the travels of J. George Gmelin had deſcribed. But this ought not to induce us to regard the labour of M. Pallas as a repetition, which might eaſily have been diſpenſed with; the plan of M. Gmelin differed entirely from his, and was incomparably more contracted, as to the department of natural hiſtory. Beſides, profeſſor Pallas took quite other courſes than thoſe of M. Gmelin: and Siberia had in the interval acquired an altogether different face, as well by the extenſion of its frontiers, as by the eſtabliſhments that have increaſed its population, by the new and important mines that have been put in produce, and the founderies that have been erected there; ſo that it cannot fail of gaining infinitely by any compariſon that might be made between his accounts and thoſe of Gmelin.

John Amadeus Georgi, member of the ſociety of natural hiſtory at Berlin, was at firſt deſtined by the imperial academy to relieve profeſſor Falk, who was commiſſioned with what was called the expedition of Orenburg, and then known to be in a bad ſtate of health. He ſet out, in conſequence, the 1ſt of June 1770, took the

route by Moſco and Aſtrakhan, and met M. Falk in the ſteppe of the Kalmuks, very near to an armenian caravan. He followed him acroſs that ſteppe to Uralſk (at that time Yaitſkoi-gorodok) and to Orenburg, where they remained till the end of the year. At the beginning of 1771, they travelled by conſent into the province of Iſſet, M. Falk along the lines of Orenburg, and M. Georgi by the Baſchkirèy and the Ural. He took, during the illneſs that detained M. Falk, ſeveral little journies from Tſchelyœba, capital of the province, towards ſeveral places, for obſerving a variety of natural curioſities, and the nations of the country; finding themſelves at length in a capacity to continue their courſes, at the latter end of June M. Falk proceeded by Iſetſkoi to Omſk on the Irtyſh, and directed M. Georgi to come and join him at the laſt-mentioned place by the new lines of Siberia, or of Iſchim on the frontiers of the Kirghiſes. They then proceeded in company acroſs the ſteppe of Barabin, to ſee the ſilver mines of Kolyvan near the Oby. They went alſo afterwards to viſit Barnaul, and, as much as a ſerious malady, with which M. Falk was attacked anew, would permit, the mountainous diſtrict of the mines of Altay, and the founderies that depend on Barnaul. Towards the end of November

they

they continued their journey, following the firſt elevations of mount Kuſnetſk, to Tomſk. It was in this city that M. Falk received from Peterſburg a permiſſion to return, on account of his ill ſtate of health. M. Pallas, the chief of the expedition, now remaining alone in the vaſt regions of Siberia, M. Georgi, as we have already ſeen, was entered of his company, and travelled, though ſeparately, under his direction.

We ſhall here give a ſhort intimation of the places viſited by M. Georgi: from Irkutſk he proceeded to the lake Baikal, of which he drew an excellent chart, and thence into Dauria, for the purpoſe of examining the mines of that name, and into the diſtrict of the mines of Arguſſin; thence he returned by Irkutſk to Tomſk, Tara, Tobolſk, Iſetſkoi, Ilina, Ekatarinenburg, and Ufa, viſiting all the mines of thoſe countries; he returned thence by Perme, on the Ural of the Baſchkirs; once more from Ufa to Tzaritzin and Orenburg; and laſtly along the Volga, from Aſtrakhan to Peterſburg by Saratof, Bolgari, Kazan, Makarief, Pavlova, Niſhney-Novgorod, Yaroſlavl, and Tver. On the 10th of September 1774, he arrived in the imperial reſidence.

On

On coming to Kazan in March 1774, M. Georgi found profeſſor Falk ſtill there, and extremely ill, which he terminated, together with his life, by his own hand a few days after. Two or three particulars of his biography * will not be diſagreeable to the reader.

M. Falk was born in Weſtrogothia, a province in Sweden, about the year 1727. He ſtudied medicine in the univerſity of Upſal, and went through a courſe of botany under the celebrated Linnæus, to whoſe ſon he was tutor. He publicly defended the diſſertation † which that famous botaniſt had compoſed on a new ſpecies of plants, which he called Aſtromeria. In the year 1760, when M. Georgi for the firſt time was at Upſal, the latter was already ſo deeply affected with depreſſion of ſpirits, that M. de Linné, in the view of obliging him to take exerciſe and diſſipation, ſent him to travel over the iſland of Gothland, to make a collection of the plants it produces, and the various kinds of corals and corallines which the ſea leaves on its ſhores. This voyage was attended with no diminution of his diſtemper, which found a

* From the journal of M. Georgi.

† In the collection known under the title of *Linnæi amœnitates academicæ.*

continual

continual ſupply of aliment in a ſanguine melancholy temperament, in a too ſedentary way of life, and in the bad ſtate of his finances.

Profeſſor Forſkael having left Upſal for Copenhagen in 1760, Falk followed him thither, in the deſign of applying, by the advice of M. de Linné, to be appointed aſſiſtant to M. Forſkael in his famous journey through Arabia; but, notwithſtanding all the pains that M. Œder and ſeveral other men of literary reputation at Copenhagen took in his behalf, his application failed, as the ſociety that were to go on that important expedition was already formed. Obliged, with much diſcontent, to return, he herboriſed as he travelled and enriched the Flora Suecica with ſeveral new diſcoveries.

A man in office at St. Peterſburg, having written to M. Linné to ſend him a director for his cabinet of natural hiſtory, M. Falk accepted the poſt, which led him to the chair of profeſſor of botany at the apothecaries garden at St. Peterſburg, a place that had been vacant from the time that it was quitted by M. Siegeſbek. His hypochondriac complaint ſtill continued to torment him. When the imperial academy of ſciences was preparing in 1768 the plan of its learned expeditions, it took M. Falk into its ſervice,

ſervice, though his health was uncertain. He was recalled in 1771; but, having got only to Kazan in 1773, he there obtained permiſſion to go and uſe the baths of Kiſſiar, from which he returned again to Kazan at the end of the year with his health apparently better.

But his diſeaſe ſoon returned with redoubled violence. From the month of December 1773, he had never quitted his bed, nor taken any other nouriſhment than bread dried in the ſwediſh manner (knækebrœd), of which he ſcarcely took once a day ſome mouthfuls dipped in tea. At firſt he received the viſits of a few friends; but afterwards denied himſelf to them, and was reduced to the ſtricteſt ſolitude. When M. Georgi went to ſee him, nothing ſeemed left of him but a ſkeleton of a wild and terrifying aſpect. The few words he drew from him conſiſted in complaints occaſioned by a hoſt of diſeaſes which kept his body in torture, and threw him into the moſt cruel ſleepleſſneſs. The laſt evening M. Georgi kept him company till midnight. He ſpoke little, and ſaid nothing that could give reaſon to ſuſpect the deſign he was meditating. His hunter, and at the ſame time his truſty ſervant, offered to ſit up with him the night; but he could not be perſuaded to conſent.

M. Georgi

M. Georgi being requeſted the next day, March 31, to come to the lodging of the unfortunate gentleman, he found him lying before his bed, covered with blood; beſide him lay a razor, with which he had given himſelf a ſlight wound in the throat, the fatal piſtol, and a powder-horn; all together preſenting a tremendous ſpectacle. He had put the muzzle of the piſtol againſt his throat, and, reſting the pommel upon his bed, he diſcharged the contents in ſuch manner, that the ball having gone through his head, had ſtuck in the cieling. His ſoldier had ſeen him ſtill ſitting up in his bed at four o'clock, at which time he uſually fell into a ſhort ſlumber. In his chamber was found a note written the evening before, betraying throughout the diſtracted ſtate of his mind, but nothing declaratory of his deſign, or that was of any importance.

M. Falk, like all hypochondriac perſons, was not very communicative, and on certain occaſions was diſtruſtful. But at the ſame time he was of a ſedate temper, complaiſant, and upright, which made it a very eaſy matter to bear with him, and ſecured to him the indulgence of all his acquaintance. His extreme ſobriety had enabled him to make ſome ſavings from his pay, though he was very beneficent; it was not there-

therefore indigence that drove him to this act of violence. He was of a cold conſtitution, preferring ſolitude and quiet to ſociety, to the company of his friends, and to ordinary amuſements, which yet he did not ſhun, except in the latter period of his life. As to religion, he ſhewed on all occaſions more reſpect for it, than any ſtrong effuſions of zeal. It was ſolely to be aſcribed to the violence of his diſtemper, and the weakneſs of mind which it brought on, that led him to put a period to his days. The fate of this unfortunate ſcholar was generally and juſtly lamented *.

In the number of thoſe who were of the expedition of M. Pallas was alſo captain Nicholas Rytschkof, ſon of Peter Ivanovitch Rytſchkof, counſellor of ſtate, who made himſelf famous for his topography of Orenburg. Rytſchkof the ſon, in 1769, went over ſome diſtricts of the

* His papers were found in the greateſt diſorder. They contain, however, very uſeful and important relations. He particularly made it his buſineſs to inquire about the Kirghiſes and other tartarian nations; and as he frequently remained for the ſpace of nine months together in the ſame place, he was enabled to procure ſatisfactory notions concerning the objects of his inveſtigations. The imperial academy, in 1774, appointed profeſſor Laxmann to arrange his manuſcripts in order for publication; which was done accordingly.

govern-

governments of Kazan and Orenburg; proceeded eaſtwards from Simbirſk, and thence northwards beyond the Kama, declining afterwards to the north-eaſt along the Ural mountains, which he traverſed in his way to Orenburg. In 1770 he viſited the countries extending the length of the weſtern bank of the Bielaya, as far as the Kama, which he courſed as far downwards as Kazan; then croſſing the province of Viatka, he paſſed on to Glinof, came into Perme, and ſurveyed the environs of Solikamſk; thence, deſcending along the Kama nearly as far as Kungur, he proceeded by Ekatarinenburg to Tſchelyabinſk. In 1771, on departing from Orſk, he viſited the ſteppe of the Kirghis-kozaks on this ſide the Yaïk, paſſed the rivers Irgis and Turgai, came as far as the mountains of Ulu-tau, thence bore away to Uſt-viſk and Orenburg, and came at laſt, by a part of the province of Ufa, quite to the Dioma.

M. Lepechin, by birth a Ruſſian, who, after having gone through his firſt ſtudies at the imperial academy of ſciences at St. Peterſburg, went to purſue a courſe of medical ſtudy at Straſburg, where he was admitted M. D. and was received in 1768 as adjunctus, and in 1771 member of the ſame imperial academy, was at the head of another of theſe expeditions. He ſet

out the 8th of June 1768, from Peterſburg, proceeded ſtraight to Moſco; thence by Vladimir, Murom, Arſamas, Alatyr, conſequently by the government of Niſhney-Novgorod, to Simbirſk in the province of Kazan: from which place he ſet out in the month of Auguſt, to viſit the courſe of the river Tſcheremſchan, which divides the government of Kazan from the province of Stavropol, and thence travelled over various parts of the government of Orenburg. In autumn he reached Stavropol, paſſed the winter at Simbirſk, and the ſpring of 1769 in the province of that name: the following ſummer he came to Aſtrakhan; from which city, in the month of Auguſt, he made an extremely remarkable journey to Gurief, croſſing the ſteppe which extends between the Volga and the Yaïk; from Gurief he went up along the Yaïk as far as Orenburg, and reached in the month of October the little town of Tabynſk ſituate near the centre of the Ural of Orenburg on the river Bielaya, where he wintered. In the month of May following, he purſued upwards the courſe of the Bielaya, examined the mountains, came in July to Ekatarinenburg, ſtruck forwards into the Ural, and attained, beyond the Kungur, to the ſummit of the higheſt of the Ural of Orenburg, whence he returned to Ekatarinenburg,

burg, and paſſed the winter at Tiumin in the province of Tobolſk.

In the month of May 1771, he reached the ſummit of the higheſt mountain of the Ural-chain, which runs between Verkoturia and Solikamſk, viſited, during the ſummer, the province of Viatka, proceeded by Uſtiug to Archangel, where he embarked in order to examine the coaſts of the White-ſea. He made Archangel his winter-quarters that year. The following year, 1772, was employed by our learned traveller in making a ſecond courſe on the ſea juſt mentioned, along the ſhores and the iſles lying to the left of Archangel, as far as the weſtern and northern coaſts, proceeding thence to the mouth of the White-ſea: he afterwards doubled Kaninnoſs, and at length returned by the gulf of Mezen to Archangel, whence he ſet out, towards the cloſe of the year, for St. Peterſburg. During the ſpring and ſummer of 1773, he viſited the environs of Pſcove, Velikiye-Luki, and Toropetz, with divers other parts of the governments of Pſcove and Mohilef: in the month of Auguſt he went from Polotſk along the Duna to Riga; whence he proceeded, following the ſea-ſhore, to Pernau, then to Valk, Neuhauſen, and Pſcove: after which he returned in December

to St. Peterſburg, and probably thus terminated the travels on which he was ſent.

Dr. J. GULDENSTÆDT took his departure about the middle of June 1768, from St. Peterſburg, in order to proceed by Novgorod along the weſtern coaſt of the lake Ilmen, by Porkof, Staraia-ruſſa, and Toropetz, to Moſco, where he tarried from the 11th of September to the 8th of March 1769; when he ſet out for proceeding by Kolomna, Epiſani, Tula, and Eletz, to Voronetch; thence to Tavrof, to Tambof, to the fortreſs of Novochoperſkaia; and, after having courſed along the rivers Chopa, Medvieditza, and the banks of the Don, he arrived the 11th of October at Tzaritzin, where he remained till the 23d of November: he afterwards went to Aſtrakhan, where he arrived the 4th of December, and then proceeded to Kitzliar, a ruſſian frontier town on the river Terek. This place he quitted in 1770, to viſit the countries watered by that ſtream, by the Kunbalni, the Soontſcha, the Akſai, and the Koiſa, with the north-eaſt parts of mount Caucaſus; being often obliged in this courſe to return to Kitzliar, chiefly becauſe of the little ſafety he found in traverſing thoſe parts. It was for this reaſon, and on account of an illneſs that

detained him, that he did not reach Georgia that year.

The 10th of February 1771, M. Guldenſtædt left Kitzliar, with a detachment of ruſſian troops, for Oſſetia, which is a diſtrict of mount Caucaſus; and ſo ſoon as the 17th of March he was already returned to Kitzliar, which he quitted for the laſt time the 18th of May, in order to go to the hot baths on the borders of the Terek. One of the moſt conſiderable of the princes of the leſſer Kabarda accompanied him, and ſhewed him, during the months of July and Auguſt, all that country, with the northern part of the caucaſean mountains inhabited by the Dugores. Thence he returned a ſecond time to Oſſetia on the Terek, whence he departed the 11th of September under the eſcort of ſome hundreds of Oſſetians, whom the tzar Heraclius had taken into his pay, and happily arrived with them in Georgia. He was, the 25th of September, at Duſchet, a town of Karduelia. The 9th of October he left that country, in order to proceed to the river Kur, at the ſame place where tzar Heraclius had appointed his troops to make their general rendezvous, and which was only 15 verſts diſtant from Tefflis, its capital. It was there that M. Guldenſtædt had an audience in form of the tzar, who embraced him, made him

ſit down in his preſence, and promiſed to grant him every aſſiſtance that he ſhould want; which promiſe he afterwards fulfilled. He made the campaign with the tzar, who puſhed with the main body of his army to the diſtance of above 120 verſts up the courſe of the Kur; and he returned to Tefflis with that prince the 14th of November. He left this place again the 21ſt of February 1772, for Kakhetia, always in the ſuite of the tzar, and paſſed the whole of the month of March in that province of Georgia. He traverſed, in the month of May, thoſe provinces of Turcomania which are in ſubjection to tzar Heraclius. The 20th of June he went, for the laſt time, to Tefflis, in the reſolution of quitting Georgia, after he ſhould have made the tour of the provinces of tzar Solomon, and to return to Moſdok on the river Terek. On the 18th of July he made his obeiſance to that tzar, who had ſet up his ſummer-camp on the ſouthern bank of the river Rion, ſome verſts below the fortreſs of Minda. The prince gave our traveller a very gracious reception. The 5th of Auguſt 1772 he quitted the diſtrict of Radſcha, which makes part of the kingdom of Immeretia, and repaired to Kutatis, the capital of the lower Immeretia; then made the tour of the frontiers of Mingrelia and Guria, the eaſtern part of

Immeretia

Immeretia and middle Georgia. Tzar Solomon had given him an eſcort of 300 Immeretians to attend him on his tour. As he was preparing to proceed farther on, he was forced for ſome time to ſuſpend his march, as the greater part of his people had fallen ſick. In this interval he received a ſupply of men, horſes, and proviſions, from a georgian nobleman whom a little before he had cured of an ailment. On the 1ſt of October he reached the laſt gruſinian or georgian village, where he was again obliged to ſtop for a month, in conſequence of advices that he received of 300 Aſſetinians who were waiting on the ſhore of the Terek to attack and to plunder him. In the interim the major-general of Medem, being informed of his ſituation, ſent a detachment of 600 men with two pieces of cannon, at the arrival of whom the robbers diſperſed. By this means M. Guldenſtædt happily regained the frontiers of Ruſſia, and returned firſt to Moſdok, and afterwards to Kiſliar. In April 1773, he made an excurſion to Peterſbade [the baths of Peter], whence he returned the ſucceeding month and immediately ſet out for Moſdok, and in the month of June went upwards along the Malka. From that river he turned off towards the eaſtern branch of the Kuma, and proceeded to the five mountains

or Beſch-tau, which form the higheſt part of the firſt elevation of Caucaſus: he viſited the mines of Madſchar, from which he took the route of Tſcherkaſk, where he arrived the 24th of July. From this laſt town he made a tour to Azof; being returned to Tſcherkaſk, he proceeded by Taganrok along the ſea-coaſt, croſſed the river Kalmius, following at the ſame time the Berda and the new lines of the Dniepr, and came by the eaſtern bank of that river to Krementſchuk, the capital of the government of New-Ruſſia, where he arrived the 7th of November, and paſſed the reſt of the winter. He had not yet quitted this government, though already on the way to the Krimea, when he received orders on the 20th of July 1774, as did all the other academical travellers, to return to St. Peterſburg. Accordingly he turned back, and came by Krementſchuk, and along the lines of the Ukraine as far as Bielefskaia-krepoſt; thence bent his courſe over Bachmut, and beyond towards the ſouth-eaſt and the eaſt, as far as the rivers Mius and Lugantſchik. Being returned to Bielefskaia-krepoſt, he left it for the ſecond time the 16th of December, and came by Kief to Serpukof; where, having collected all the perſons and all the effects belonging to his expedition, he took his departure the 20th of

of December for Moſco, and in the courſe of March arrived at St. Peterſburg *.

Such is the general outline of theſe intereſting travels from which the learned of Europe have received ſo much information, and which properly finds a place in the introduction to a work that owes ſo great a part of its materials to the labours of theſe academicians. The diſcoveries made by the Ruſſians at ſea at various epochas, and particularly during the reign of Catharine II. have been ſo faithfully laid before the public by Mr. Coxe in his well-known work profeſſedly written on that ſubject, that it would be unneceſſarily ſwelling the bulk of theſe volumes to ſay any more of them here. However, it is impoſſible to take leave of theſe expenſive and important miſſions without teſtifying our acknowledgment, with that ingenious and candid writer, of the benefits that have accrued to ſcience from theſe learned and laborious inveſtigations, and to join with him † and every friend to rational inquiry, "in the warmeſt admiration "of that enlarged and liberal ſpirit, which

* See Bachmeiſter's Ruſſiſche Bibliothek, tom. i. ii. and iii. where very circumſtantial accounts of all the ſeveral courſes purſued by theſe travellers are to be found.

† Coxe, Ruſſian Diſcoveries between Aſia and America, preface, p. xi.

"ſo

" ſo ſtrikingly marked the character of the late
" empreſs of Ruſſia; who, from her acceſſion to
" the throne, made the inveſtigation and diſ-
" covery of uſeful knowledge the conſtant object
" of her generous encouragement. The au-
" thentic records of the ruſſian hiſtory were by
" her orders properly arranged; and permiſſion
" was granted of inſpecting them. The moſt
" diſtant parts of her vaſt dominions were at her
" expence explored and deſcribed by perſons of
" great abilities and extenſive learning; by
" which means new and important lights have
" been thrown upon the geography and natural
" hiſtory of thoſe remote regions. In a word,
" this truly great princeſs contributed more
" in the compaſs of only a few years, towards
" civiliſing and informing the minds of her
" ſubjects, than had been effected by all the
" ſovereigns her predeceſſors ſince the glorious
" æra of Peter the great."

CON-

CONTENTS

OF THE

FIRST VOLUME.

BOOK I.

Of the natural ſtate of the empire.

SECTION I. Amplitude, boundaries, and diviſion of the empire, page 1.

SECTION II. Climate and quality of the ſoil, 21. Froſt and ſnow, advantages ariſing from, 27. Bones and teeth of elephants, &c. found in Siberia, 29. General diviſion of the empire, 30. Deſcription of Taurida, 33. Meteorological obſervations of the academy, 41. The covering of the Neva with ice, 47. Departure of the ice, 48. The empreſs Anna's palace of ice, 49. Effects of the cold, 53. Inundations of the Neva, 54. General remarks, 66. Nature of the ſoil, 69. Arable land, 70. Meadows, 73. Foreſts, 75. Mountains, 79. Steppes,

Steppes, 81. Moraſſes, 84. Waſtes, 86. Paſture grounds, 87. Salt places, 88. Mines, 93. The mountains of ruſſian Lapland, 107. The Valday mountains, 122. The mountains of Taurida, 130. The Ural mountains, 137. The Altay mountains, 145. The Ubinſkoy mountains, 157. The Sayane mountains, 163. The mountains of Kamtſhatka and the eaſtern iſlands, 174. Of the principal plains of Ruſſia, 176. The ſteppe of Petſhora, ib. The ſteppe of the Dniepr, 177. The ſteppe of the Don and Volga, 178. The ſteppe of the Volga and Ural, 179. The ſteppe of the Irtyſh, 180. The ſteppe of the Oby and Yeniſſey, 181. The ſteppe of the Yeniſſey and Lena, 182. The ſteppe of the Lena and Indighirka, ib.

SECTION III. WATERS. Of the ſeas forming the boundaries of the ruſſian empire, the Frozen or the Northern ocean, 182. The Eaſtern or the Pacific ocean, 185. The peninſula of Kamtſhatka, 186. Behring's iſland, 189. The Copper iſland, The Kuriliſkoy iſlands, 191. The Aleutſky iſlands, 203. Harbours in theſe ſeas, 208. The Euxine, or Black-ſea, 211. The Baltic, its harbours, and iſlands, 212. Dago, 213. Œſel, 214. Mohn, 217. Ruun, 219. Dagerort, 222. Vorms, Nuk, and Kaſſar, 224. Hochland, &c. 225. Cronſtadt, 228.

Of the inland ſeas and principal lakes of Ruſſia.—The Caſpian, 232. The Baikal, 241. The Ladoga, 242. The Onega, 243. The Peipus, 244. The Ilmen, &c. 247.

Of

Of the chief navigable rivers of Ruſſia.—The Duna, 248. The Neva, 252. The Dvina, &c. 260. —Rivers that fall into the Frozen-ocean: The Petſhora, 261. The Oby, 262. The Tobol, 264. The Yeniſſey, 265. The Khatanga and the Lena, 267. The Yana, 268. The Indighirka and the Kovyma, 269. Rivers that flow into the Eaſtern or Pacific ocean: The Anadyr, 269. The Kamtſhatka and the Amoor, 271.—Rivers that fall into the Caſpian: The Yemba, 271. The Ural and the Volga, 272. The Terek, 276.—Rivers that fall into the Euxine: The Kuban, 278. The Don, 279. The Dniepr, 281. Mineral waters, 283. Vitriolic waters, 188. Bituminous waters, 292. Incruſtaceous waters, 293. Canals, 294.

BOOK II.

Hiſtorical View of the Nations of the Ruſſian Empire.

Section I. Slavonians, 307. Aborigines of Ruſſia, 310. Rurik, 316. Oleg, 317. Alexander Neſſky, 320. Partition of the ruſſian empire, *ibid.* Extinction of the dynaſty of Rurik, 323. Character and manners of the Ruſſians, 332. The Kozaks, 390. Their form of government, 409. Siberian Kozaks, 445. The Poles, 449. The Servians, 454. Lithuanians, &c. 455. Livonians, 460. Courlanders, 463.

SECTION II. Finns, 468..481. Norwegians, 476. Laplanders, 474. Eſthonians, 484. Lettonians, 490. Livonians, 504. Permians, 527. Yummala's temple, &c. 528. The Syriænes, 532. The Vogules, *ibid.* The Votiaks, &c. 534. The Mordvines, 536. The Oſtiaks, 537. Some particulars from the Chronicle of Henry the Lette, 539. Chriſtianity in Livonia, 540. Meinhard the monk, 542. Superſtitions of the Livonians, 543. Cruſade againſt the heathens in Livonia, 545. Haaks of land explained, 547. Knights Templars, 549. Biblical plays acted at Riga, 551. Good deeds of Archbiſhop Andrew, 557. Progreſs of Chriſtianity more ſlow in Eſthonia than in Livonia, 556. Curious baptiſms, 558. Chriſtianity proceeds more rapidly, 559. Papal legate in Riga, 561. Effects of converſion, 562. Knowledge of the countries among the Romans, 563.

VIEW

VIEW

OF THE

RUSSIAN EMPIRE.

BOOK I.

OF THE NATURAL STATE OF THE EMPIRE.

SECTION I.

Amplitude, boundaries, and diviſion of the empire.

BY Ruſſia is ſometimes underſtood the whole ruſſian empire; yet theſe two expreſſions have properly a very different ſignification. Ruſſia implies thoſe principalities and provinces which for many ages paſt have been inhabited by Ruſſians *. But it is well-known that there are ſeveral Ruſſias, namely: 1. Great Ruſſia, which has always bore the name of Ruſſia in

* For about 1300 or 1400 years, as far back as authentic hiſtory reaches: this however is principally to be underſtood of Great and Little Ruſſia.

the ſtricteſt import*, and compriſes thoſe large tracts of country, principalities, viceroyalties, and dukedoms which have uninterruptedly compoſed the ruſſian dominion; as Moſco, Vladimir, Novgorod, Pſcove, Perieſlaf, Riaſanſkoi, Kaluga, Tula, Yaroſlaf, Koſtroma, Tver, Vologda, &c. 2. Little Ruſſia, comprehending the Ukraine†, or in general the preſent three governments of Kief, Tſchernigof, and Novgorod-Sieverſkoi‡. 3. White Ruſſia, by which, for a long period of time, was meant the principality, or the preſent government of Smolenſk; to which are now reckoned the two governments of Polotzk and Mohilef, ſtill ſometimes called the white-ruſſian territory: otherwiſe the name of White Ruſſia is no longer heard of. To theſe were added, 4. New Ruſſia, by which were denoted the large tracts of country near the Ukraine, towards Poland and the turkiſh dominion; namely, New Servia and the province St. Elizabeth, which now belong to the government of Ekatarinoſlaf, and therefore its name has fallen into diſuſe.—The three laſt have not always been united with Great Ruſſia.

* To take notice of its old obſolete names is the province of the antiquarian; and here would be out of place.

† Which word ſignifies *the borders*.

‡ It was long ſeparated from Great Ruſſia; but united to it again in 1654.

But,

But, by the ruſſian empire, is likewiſe underſtood, not only thoſe, but alſo ſuch kingdoms, countries, and provinces as have been at various times ſince added to it by conqueſts and appropriations; as, 1. The kingdom of Kazan, which was conquered by tzar Ivan Vaſſillievitch in 1552, at preſent conſiſting of ſeveral governments. 2. The kingdom of Aſtrakhan, taken by the ſame monarch*; at preſent likewiſe divided into ſeveral governments. 3. The vaſt country of Siberia; which, by calculation, contains upwards of ten millions and a half of ſquare verſts, comprehending within it ſeveral kingdoms, taken by roving Kozaks on their own account, and then ſurrendered to the tzar, who completed the conqueſt; this at preſent conſiſts of ſeveral, but thoſe the moſt extenſive governments. 4. The provinces on the ſhores of the Baltic, captured from the Swedes by Peter I. and for ever incorporated with the ruſſian empire by two treaties of peace; namely, Livonia, Eſthonia, Finland, and Ingria, or the preſent governments of Riga, Reval, Viborg, and St. Peterſburg. 5. The countries taken from Poland, now the governments of Polotzk and Mohilef, which the empreſs Catharine II. united to the empire. 6. The territory ſhe an-

* Kabarda, likewiſe, ſoon afterwards ſubmitted.

nexed to Ruſſia by the peace concluded with the Turks in 1774. 7. The Krim and the Kuban, or the province of Taurida and the government of Caucaſus, united to the empire by that ſovereign in 1783. 8. The tributary iſlands in the eaſtern ocean, added to Ruſſia in the preſent century. 9. The countries that have more recently ſubmitted to the ruſſian ſupremacy, namely, Kartuelia or Kartalinia, &c. 10. The poſſeſſions in America, conſiſting partly of iſlands, partly of the firm land of California, where the principal eſtabliſhment is called Donaleſk. 11. Some other countries incorporated with the empire at various periods; as, the Kirghiſ-kaiſaki, of the middle and little horde, who ſubmitted themſelves in 1731, and ſeveral others.

Hence it appears that the ruſſian empire has not always been of ſuch magnitude as at preſent. In the thirteenth century even Lithuania was not ſo far from Moſco* as now. From this ſlight inſpection it is manifeſt that the amplitude of the empire is far greater than that of the largeſt monarchy in antient or modern times. Accordingly, the empreſs, in her letter of grace to the ruſſian nobility in 1785, expreſſes herſelf in

* The proper name of this capital is Moſkva; but Moſco is grown into ſuch familiar uſe by long eſtabliſhed cuſtom, that we ſhould no more think of altering it than of reducing Warſaw to its right name of Varſchau, or calling the Tartars by their proper name Tatar.

the

the following manner: "The ruſſian empire is "diſtinguiſhed on the globe by the extent of its "territory, which reaches from the eaſtern "borders of Kamtſhatka to beyond the river "Duna which falls into the Baltic at Riga: "compriſing within its limits a hundred and "ſixty-five degrees of longitude; extending "from the mouths of the rivers Volga, Kuban, "Don, and Dniepr, which fall into the Caſ-"pian, the Palus Mœotis, and the Euxine, as "far as the frozen ocean, over two-and-thirty "degrees of latitude." The ſame number of degrees is aſſigned it by this ſovereign, in her inſtructions to the commiſſion for framing a code of laws. But, from her own words, it plainly appears, that ſhe only takes notice of the countries contiguous to each other, according to the general extent; but none at all of the iſlands, or the numerous promontories and points of land that ſtrike out from them. The iſlands in the eaſtern ocean are not once mentioned. Even the iſle of Œſel, with its weſtern promontory, reaches ſeveral degrees farther than the river Duna. If we take all theſe into the account, the ruſſian empire, according to the neweſt and beſt charts, will be found to extend from about the 43d to the 78th degree of north latitude; and from the 39th to the 215th degree

of longitude; this laſt however including the iſlands lying in the eaſtern ocean. M. Buſching differs from this ſtatement, thinking its longitude, or the extent of it from weſt to eaſt, to extend from the 40th to the 230th degree, if we admit that the newly-diſcovered iſlands taken poſſeſſion of by the Ruſſians between the north-eaſtern parts of Aſia and America reach ſo far. But this ſeems to be allowing too much. He affirms the empire to have, from north to ſouth, from 20 to 25 degrees of latitude. This again is manifeſtly too little, as the abovementioned deciſive ſtatement of the empreſs, in concurrence with the beſt maps, determine the latitude quite otherwiſe.

Without reckoning the iſlands, the empire extends in length above 9200 engliſh miles, and in breadth 2400. — From Riga to Anadyrſkoi-oſtrog, the diſtance is 11,298 verſts. — The kalendar of the imperial academy at Peterſburg ſets it down at ſomewhat leſs. If we draw a line acroſs Moſco, from Riga to the haven of Peter and Paul, as the two extreme boundaries of the continent, we ſhall find it only 10,936 verſts; from Riga to Moſco being 1018, but from thence to Petropavlofskoi port, 9918 verſts. On the contrary, according to that kalendar, the breadth is much larger. From Kertch to Moſco is reckoned

reckoned at 1477, and from thence to Kola 2109 verſts; though it is notorious that theſe two places are not by far the extreme boundaries *.

With regard to the appellatives, Red, White, Black, &c. ſome farther explanation ſeems neceſſary. It is well known that the ſtate of Poland contains ſome provinces that bear the name

* In order to render the extraordinary magnitude of the ruſſian territory more apparent by a compariſon, let us adduce to the above ſtatement the data which one of the beſt informed hiſtorians has given of the extent and circumference of the roman monarchy at the height of its grandeur. 1. At that time the roman empire contained about 1,600,000 ſquare miles; therefore exactly as much as only the european part of Ruſſia. 2. The greateſt length of it, from the Euphrates to the weſtern ocean, amounted to 3000 miles, and the greateſt breadth, from the wall of Antoninus to the pillars of Hercules, 2000 miles. If we travel the length of the ruſſian empire, we ſhall find it to be, from Riga to Anadyrſkoioſtrog, 9684 miles, and thence to the haven of Peter and Paul, in Kamtſhatka, 1750 more. 3. The poſſeſſions of the Romans extended ſomewhat ſhort of 32 degrees of latitude; Ruſſia compriſes 35½. *Gibbon*—Roman empire, 4to. vol. i. p. 33. — But, if we conſider that the dominion of the Romans extended over the fineſt part of the temperate zone (from the 24th to the 56th degree of north latitude), and that the ground in the whole circuit of that territory conſiſted of the moſt fertile and productive countries of three quarters of the world, this ſeeming ſuperiority immediately vaniſhes.

of Ruſſia, without however being at preſent a part of the ruſſian empire. Of this ſort is the province of Red Ruſſia in the leſſer Poland, of which only the country of Chelm has remained to the Poles; alſo lithuanian Ruſſia in the grand duchy of Lithuania, comprehending within it White and Black Ruſſia, partly come back to the ruſſian empire to which it originally belonged, being governed in the twelfth century by ruſſian princes at Polotzk, deſcended from the princes of Kief. It is highly probable that even the whole of Red and Black Ruſſia were formerly hereditary provinces of the ruſſian empire, of which perhaps proofs are ſtill in being among the archives of Ruſſia. Without ſtopping here, however, to diſcuſs what ſort of title Ruſſia may have to any ſuch ſucceſſion; it is but right to mention that we have not any where been able to find a ſatisfactory account of the origin of theſe names and their proper ſignification. Perhaps they may have been entirely without any; ariſing from accident, mere arbitrary denominations of certain tracts of country inhabited by Ruſſians. At leaſt this ſuppoſition is warranted by a cuſtom obſerved in remoter times by the ſlavonian nations. Thus, concerning Servia, we know that the illyrico-ſervian empire was antiently called Red Servia; the german Sorbenland, White Servia; and the territory of Servitza, the Black Servia.

Servia. In like manner, the Crovats, as long as they dwelt in Bohemia, gave the country the name of Bielo Crobatia, that is, White Croatia. A part of Dalmatia being then ſtyled by them Red Croatia. — Hence we might be led to conclude that the appellations White, Red, and Black Ruſſia, muſt be of great antiquity. In the mean time, it muſt be confeſſed that Mr. Muller, ſo juſtly famous for his reſearches into ruſſian hiſtory, is of a different opinion. As his thoughts on this ſubject contain much information, they deſerve to be noticed here. He ſays: All the ruſſian annals teſtify, that antiently there was but one undivided Ruſſia under that general denomination, which extended toward the weſt, nearly upon the Viſtula. The names of Little and White Ruſſia were not heard of till after ſome principalities were taken in the 14th century by the lithuanian princes, and in the ſequel incorporated with the kingdom of Poland. What bears the name of Red or Tſchervonian Ruſſia, it is true, received its denomination from the tſhervenſhian towns that form the principal part of it; but White Ruſſia was ſingly and alone thus named by the Poles and Lithuanians, in order to diſtinguiſh it from the reſt of the ruſſian empire; which they ſtyled Great Ruſſia, not ſo much in regard to Little Ruſſia, as to the ſpaciouſneſs of its extent. — Ruſſia was much weakened by the exciſion

exciſion of ſeveral of its principalities as well as by the inroads of the Tartars: but after the grand duke Ivan Vaſſillievitch I. had united the majority of them under his ſole ſovereignty and thrown off the tartarian yoke, he firſt ſtyled himſelf MONARCH OF ALL RUSSIA; which title was continued till the time of tzar Alexey Michailovitch; for the conqueſt of ſome diſtricts in Little and White Ruſſia, made by the grand duke Vaſſilli Ivanovitch and the tzar Ivan Vaſſillievitch, were only of ſome particular towns and principalities, whereof ſeveral were in the ſequel forced back by their former maſters. But when tzar Alexey Michailovitch, in the year 1654, had taken under his dominion the little-ruſſian Kozaks, together with their towns and the whole population of Little Ruſſia, he began to ſtyle himſelf SELF-RULER [AUTOCRATOR] OF GREAT AND LITTLE RUSSIA; in teſtimony whereof there is ſtill a decree of this tzar's, bearing date July 1, 1654. This monarch, in the ſame year, took the town of Smolenſk by force of arms, and returned to Moſco; but prior to his expedition for the conqueſts in White Ruſſia and Lithuania, being indubitably perſuaded that he ſhould reduce the regions formerly raviſhed from Ruſſia to ſubmiſſion, he cauſed to be inſerted in the tzarian titles, the words: OF ALL RED AND LITTLE AND WHITE RUSSIA; the firſt

uſe of which appears in the *Univerſal* of the 21ſt of February 1655, as at that time Mohilef, Orſha, Vitepſk, Polotzk, Dunaburg, Boriſſof, Minſk, Vilna, Grodno, &c. together with all their towns and dependencies, were actually conquered. Sweden alone threw obſtacles in his way; while the Poles were making flattering promiſes to elect him to the throne of that kingdom: but the peſtilence that followed, obliged this monarch to abandon his conqueſts. — Hence, however, it is clearly ſeen what we are to underſtand by the term White Ruſſia.

The ruſſian empire received a freſh augmentation at the treaty of peace concluded with the porte the 29th of December 1791; that is to ſay, the whole of the territory of Ochakof on the Bogue, as far as the Dnieſtr, which laſt-mentioned river is now ſettled to be the boundary for ever *.

The

* In addition to what has already been ſaid of the extent of the empire, we will juſt give two calculations as made by profeſſor Kraft of the academy of ſciences. By ſome experiments in regard to the table for zones, where the flattening of the ſpheroid amounts to $\frac{1}{200}$, he found that the whole empire, whoſe northern latitude he admits to be 42° 31′ to 78° 30′ including the inland ſeas †, but excluſive of all the bays and gulfs, to be in the frigid zone 67,157

† Conſequently he gives the empire a greater northern extent than we thought ourſelves authorized to do.

geogra-

The empire has hitherto been considered as lying in but two quarters of the globe, namely Europe and Asia; future geographers may perhaps have to describe its dominions in a third, the continent of America; for the territory there, though probably at present but insignificant, may easily be extended and increased. Indeed from the forementioned russian establishment on the firm land of America, and the islands already made tributary there, the empire might even now with propriety be said to extend into that quarter of the globe.

Russia, by its magnitude and situation, has very various frontiers as well as neighbours.

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geographical square miles, (15 to a degree of the equator,) and in the temperate 263,349; together $\frac{1}{12}$ of the northern hemisphere, or 330,506 square geographical miles. By this calculation all the general maps of the russian empire then in being were proved to be wrong; and indeed the accuracy of all that have since appeared, at least in regard to several regions, may be very much questioned. If we add to this, that since the year 1783 Russia has greatly enlarged its territory, at the same time that the islands of the eastern ocean, between Asia and America, in so far as they are actually tributary to Russia and consequently belong to the empire, cannot be accurately laid down and brought into the account, which yet properly should be done; it will then appear that none of the statements hitherto made are to be considered as complete.

On two ſides, namely, to the north and the eaſt, if we omit the eſtabliſhment on the continent of America, it is ſurrounded by ſeas. On the other ſides it is bounded partly by terra firma, partly by ſeas, and here and there by rivers, namely, to the weſt by Denmark, by Sweden, and by the Baltic; but to the ſouth, by Courland, Poland, Turkey, the Euxine and the Caſpian, by Perſia, China, and various tribes of almoſt ſavage, nomadic, or, in one word, unpoliſhed nations. Some of theſe borders are capable of enlargement, eſpecially in the numerous iſlands of the eaſtern ocean, which might eaſily be made tributary, as no other foreign power can lay any well-founded claim to them; again in the north on the firm land of America; and among the independent hordes of Aſia, who, beſides, on account of their turbulence ſometimes deſerve a little correction. — Other frontiers are fixed by treaty, viz.

1. With Denmark, concerning Lapland or Finnmark, in the year 1602.

2. With China and the Mongoles, in 1727. By the careleſſneſs of a ruſſian miniſter, who acted too imprudently for the cunning Chineſe, the limits were drawn to the diſadvantage of Ruſſia.

3. With

3. With Perſia by the treaty of 1732. At preſent the river Terek is regarded in ſome reſpects as the line of limitation.

4. With Poland, by various treaties in 1667, 1672, 1717, 1721, 1773, 1776, 1781, 1793, which however were not finally adjuſted till 1795.

5. With Sweden, by the treaties of 1721 and 1743. However, the borders are not yet accurately ſettled; for ſeveral iſlands in the river Kymmene, and numbers of bordering boors, belong neither to one nor the other of theſe powers, and therefore the latter live very comfortably in their own way, exempt from all tribute and burdens of every kind.

6. With the Turks, the antient treaties were explained and amended by new ones in the year 1739, and ſtill more in 1774 and 1786; and which we may probably expect to be done again, now that the two empires are come to a proper underſtanding.

7. With Courland the laſt ſettlement was made in 1783, till the final ſurrender of their independence in 1796.

This diverſity of boundaries and neighbours, requires very diverſe means of ſecurity and occaſional defence. Theſe muſt conſiſt either in ſtrong places, or a great force by ſea and land, but both on different footings, in regard to the territory

territory and to the nation againſt which they are to be employed. In ſome parts large ſhips of the line can only enſure ſafety; in others moderate ſized veſſels, or even little armed boats, may produce the proper effect. Againſt ſome neighbours, ſtrong forts on the frontiers are kept up; againſt others a wretched wooden wall, or ſtakes drove into the ground, with two or three iron cannon, and a garriſon from 80 to 200 men, completely anſwer their purpoſe. Againſt the attacks and robberies of unciviliſed nations, lines are formed with petty forts or ramparts: ſome of theſe are provided with baſtions of earth; others, properly ſpeaking, have no fortreſs, but conſiſt merely of caſermes and ſtables, built in a quadrangular form, with a watch-tower at two corners *. Where ſecurity requires it, other forms of defence are uſed. Thus the village Raſlomayefskaia on the Tobol, between the borders of Orenburg and Siberia, is excluded from all acceſs by a ſtrong hedge, in ſome places ſtrengthened, for a conſiderable length, by chevaux de frize; but the village Niſhno-Tſchernafſkoi has a fortified wooden church †. Some parts require no defence whatever; for example, the coaſts of the frozen ocean; and the deſart

* Pallas's travels, vol. ii.

† Id. ibid. p. 406. 408, 409.

part

part of the mongolian borders, from the Ob to the Yeniſei, is entirely unfortified and open. — In ſome places a river forms the boundary; as the Kymmene, before mentioned; in like manner, the Argoun towards China; and not unfrequently a vaſt ſteppe, when the limits are not preciſely drawn with the nomadic and unciviliſed neighbours.

From Tchutzkaia zemlia, northwards over Kamtſhatka, the empire borders pretty nearly on America; being, by the lateſt obſervations, only ſeparated from it by a ſtrait of the ſea, no more than 175 engliſh miles in breadth; namely, Bering's ſtraits, which Buſching every where calls Cook's ſtraits. The Tchuktchi have not as yet been ſubjected; probably becauſe it has not been thought worth while to fit out a military expedition for that purpoſe; nevertheleſs that people acknowledge the ruſſian ſovereignty. They have actually for a long time carried on traffic with the Americans that dwell over-againſt them, make uſe of the ſame canoes with them, though they differ greatly from them both in language and dreſs. Beyond that cape, towards America, lie ſeveral iſles, two of which are uninhabited. The main land of America there (if in fact it be not a very large iſland) may be ſeen from this promontory; and another american iſland

is

is at about the distance of 210 english miles from the possessions of Russia.

We come now to speak of the uncivilized nations that either belong to the empire, or are just without its borders. The latter are by no means dangerous neighbours, but are easily kept in awe; or, if they make an attack, are presently frightened back again. Against them the former are made use of as a defence. Indeed, it was formerly a hard matter to restrain them within bounds, but we have seen under the late reign what good regulations, without violent measures, will effect.

Those that belong to the empire may indeed cause some alarms lest a swarm of them should get over the borders, as did actually once happen some years ago; but means are used for the prevention of this: it is found, however, that such people are most easily managed and kept to their antient habitations by gentle treatment. Their own chiefs and khans receive titles, dignities, and presents; and able officers are kept among them as spies upon their conduct. Should they happily, by example and encouragement, habituate themselves to a better form of government, it would then be just the same thing as if an entire nation had been added to the empire. Many of them have already addicted themselves

to agriculture, and other uſeful employments, much more than formerly. —Even the borderers, by the wiſe methods purſued by the ruſſian commanders, are become more ſerviceable to the empire, eſpecially in matters of commerce.

The boundaries in general are ſo diſpoſed, that an attack from regular foes is only poſſible on a few ſides: and againſt theſe, ſufficient means of defence are at all times practicable. A few regular enemies can never be of much conſequence, as Ruſſia always keeps on foot a reſpectable and well-diſciplined army. Beſides, the great poſſeſſions adhering together are ſo defended by the preſent conſtitutions of moſt of the neighbouring ſtates, that Ruſſia has never any need to fear an attack in the heart of the empire, though in former times a foreign enemy may have found it poſſible to penetrate ſo far.

It is ſcarcely neceſſary to ſhew that the empire, from the very nature of it, is capable of progreſſively growing to a greater, even to an aſtoniſhing magnitude, without attempting new conqueſts. It has already been attaining gradually to a high degree of power, particularly in modern times. Yet we are not to imagine (as ſome people not well-verſed in hiſtory are apt to do) that it was formerly a country abſolutely inſignificant, or even quite unknown. In

very remote periods, long before Kafan, Aſtrakhan, Siberia, &c. were conquered, Ruſſia was remarkable both for its power and its magnitude. How often did it not then ſtrike terror into the haughty ſovereigns of Conſtantinople, even while ſurrounded with the magnificence of imperial Greece? Moreover, the Poles, the Swedes, the Hungarians, even the far diſtant French, had kiovian princeſſes on their thrones. —Internal diviſions among brethren of the reigning family afterwards, indeed, weakened the empire, inſomuch that it was deluged by a powerful foreign nation. But by its own inherent vigour, without the aid of external ſuccours, it ſhook off the odious yoke, made extenſive conqueſts, and evinced to the world what it was able to perform by its own power alone. Thus it rapidly grew into one of the greateſt monarchies the univerſe had ever beheld. The coloſſus only wanted a ſkilful hand to ſhape it into form: and this it firſt found in Peter the great, and afterwards in Catharine the ſecond. —True, it was the happineſs of that emperor, that the imprudence, or rather the temerity, of Charles XII. contributed much to the rapidity of its advancement; yet the conſequences would have been leſs ſtriking and brilliant, if the internal ſtrength and greatneſs of the empire had not

ſo ſignally concurred. Under the empreſs Anna, Ruſſia, with all her ſplendid victories, and combined with Auſtria, found enough to do to put an honourable end to the turkiſh war: an evident token, that a proper uſe was not made of the peculiar greatneſs and the important reſources of the country. Of all the powers confederated againſt the king of Pruſſia in the ſeven years war, the power of Elizabeth preſſed hardeſt upon him: the conſequences were not adequate to the expence, owing to the events and combinations that happened afterwards; however, the ſtrength of Ruſſia was not then entirely manifeſt. It was diſplayed during the war with the Turks in 1772, to ſo high a degree, as to raiſe the admiration of the world. Though the empreſs at that time maintained a body of troops in Poland, yet ſhe ſtifled at once an inteſtine commotion; and without foreign aid, by her own forces, gained repeated victories over the Turks, conquered provinces and fortreſſes, appeared with fleets that ſpread terror through regions to which the Ruſſians were ſcarcely known by name, annihilated the formidable navy of her enemy, ſurrounded the whole numerous army of the Turks, performed wonders, and concluded a glorious peace. And what great atchievements were not done in the laſt turkiſh war!—Ruſſia,

if her forces be properly employed, without the aid of foreign alliance, is fully able to reſiſt the attacks of any invader. Extenſive poſſeſſions, a brave people, excellent products, and conſiderable revenues, render it in all reſpects truly great; as will more plainly appear in the following ſections.

SECTION II.

Climate, and quality of the ſoil.

From the enormous extent of the ruſſian empire, and its ſituation in the equatorial and meridional degrees before-mentioned, it will naturally be inferred that the temperatures of the atmoſphere muſt be various. It contains many regions that are bleſſed with the pureſt air, and the mildeſt ſky; but a greater number of others where the weather is extremely rude and cold, and many others again where the exhalations from the earth are not the moſt wholeſome. The parts lying towards the ſouth enjoy a warm and agreeable temperature, in which almoſt all the plants and vegetables of countries ſituated much nearer to the equator flouriſh and abound. Thus, in the region of Tzaritzin, even thoſe of China, which moſt delight in warmth,

thrive to perfection in the open air, and produce their ſeeds in full maturity. Yet it knows nothing of ſuch burning ſands as are found in the ſultry climes of Africa. Others again, in high northern latitudes, though not congealed in everlaſting ice, are yet oppreſſed with ſo ſevere a froſt as to exclude the arts of agriculture. On the whole, therefore, the climate is not exceſſively hot, except at certain ſeaſons in Taurida, ſeldomer and leſs laſting in a few other places; but in many regions it is extremely cold. However, the one tract of country not only ſupplies the deficiencies of the other; but nature has kindly provided that every climate ſhould be fitted to the wants of its inhabitants, and has adapted them to the temperature of their ſky. High to the north ſhe has diſpenſed no corn, but plenty of moſs, for the animals; and for mankind an infinite variety of berries, of fiſh, and wild fruits. Farther to the ſouth her liberality is diſplayed: beneath a mild and genial atmoſphere ſhe beſtows on the inhabitants a ſuperfluity of the fineſt products.

The remark, that places lying in the ſame degree of north latitude, or having the ſame polar elevation, do not exhibit the ſame temperature of climate, but that as we advance toward the eaſt the cold is always more intenſe,

is alſo corroborated by obſervation in the ruſſian empire. The cauſe adduced by ſome reſpectable writers, that the eaſtern regions of Europe and Aſia lie more remote from ſeas, than the weſtern, by no means ſolves the difficulty; ſince many of them lie near enough to the ſea, nearer than the weſtern, nay ſome of them are even ſurrounded by ſeas, and yet are very cold: — on this head I need only mention Kamtſhatka. — M. Pallas * ſeems to have come nearer the truth of the matter, by accounting for this phænomenon from the influence of mountains; yet even this hypotheſis is not entirely free from obſcurity and doubt.

In the middle and northern regions the winters are very cold, and the days uncommonly ſhort; but the ſummers are ſo much the longer, and the heats are ſometimes great. That the cold, however, attacks the brain, as Buſching pretends, is a miſtaken notion. In many of theſe parts the girls go always bare-headed, and the women wear only thin linen caps; and yet they neither feel headachs nor become brainſick by the practice. Only ſuch as, having been accuſtomed to a warmer country, come to live in a colder, feel the cold, eſpecially at firſt, very ſevere; yet,

* In his travels, vol. iii. p. 272.

neither by it, nor (as he elſewhere maintains) by the brandy they have drunk in their youth, do people grow mad. The provinces on the ſhores of the Baltic are ſufficient of themſelves to refute this opinion. In ſevere froſts it is no unuſual thing for men to be frozen, ſo as either to die on the ſpot, or, without ſpeedy aſſiſtance, for the limbs that are frozen to fall off by degrees: but never any one became mad by it. The wives of the livonian boors even frequently give little portions of brandy, a favourite liquor with them, to their children at the breaſt, as well as to thoſe of larger growth; yet fewer crazy and mad people are found here than in numberleſs other countries. — Whether the cold (likewiſe according to the aſſertion of Mr. Buſching) be the occaſion of certain endemial diſeaſes, muſt be left undecided. It may perhaps have been obſerved in ſome diſtricts, but never authentically. People from different provinces, to whom we have put the queſtion, knew nothing of endemial diſeaſes that had ariſen merely from cold. With delicate perſons, eſpecially of the higher claſſes, colds, defluxions, rheums, and coughs, are common enough, not merely during the cold of the winter, but alſo at other ſeaſons of the year: the common people know but little of theſe complaints. Theſe never feel any injury

jury from currents of air, which we call draughts; though perſons of the former deſcription frequently take cold even when they have not ſtirred out of their warm apartments. In ſharp biting froſts, if people are but properly clad, and forbear to ſit down, eſpecially upon the banks of ſnow, which may often coſt them their lives; they find themſelves more healthy than in the moiſt weather of autumn, though ſuch as live in the country are obliged to expoſe themſelves the whole day long in the open air, to the utmoſt force of the cold, in foreſts, on hills and mountains, in the ſtreets, &c. Any ſlight colds they may take, or any obſtructions of the pores, are ſoon remedied by the hot rooms in which they are accuſtomed to ſleep, and ſtill more by the frequent uſe of their univerſally beloved hot-bath. — One ſure proof that in general the climate is not prejudicial to health is the great number of perſons that in all theſe parts attain to a very advanced old age*.

The

* From fourſcore to ninety is an age by no means thought extraordinary; but numbers continue advancing from that period. Among other inſtances that we could adduce from various quarters, we ſhall ſelect one, of a man ſtill living, of the name of Michaila Leonof Natſhafka, who was formerly a burgher at Velitſh, and now keeps a krug, or public inn, in the village Beleika, near the old-

ruſſian

The freezing of the rivers happens too in various ways, according to the degree of cold, the quality of the water, the current, and the nature of the bed *. Some carry floating ice, which at length conſolidates; others, on a ſudden froſt, are covered at top with icy particles like gruel, which in a day or two congeals; others again, of a gentle current, are in one night covered with a thin ſcum of ice which gradually increaſes in ſubſtance; while the rivers in ruſſian Dauria, or the province of Nertſhinſk, differ from all theſe,

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ruſſian borders, and in the government of Smolenſk. So early as the year 1664, being then a well-grown boy, he was ſent by his parents to ſearch among the ſlain for the body of a relation who had fallen in the battle fought that year between the Ruſſians and the Poles. This old man is ſtill in the full enjoyment of his ſenſes, converſes intelligibly, and walks with his ſtaff daily two or three verſts on foot, for the ſake of exerciſe. — This remark was made in 1792.

* In and about Moſco the rivers freeze about the middle or latter end of November, and break up in March or the beginning of April. The birch-trees come out in May, and ſhed their leaves in September. — About Kurſk all ſorts of fruit are ripe in Auguſt, and the corn is then all got in. Suyef's travels.

In Irkutſk the thermometer, on the 9th of December 1772, ſtood at 254 degrees; notwithſtanding that the Angara there commonly freezes not till towards the end of December, and frequently not till the middle of January; and breaks up at the end of March, or in the former half of April. Georgi's travels, i. 36.

and

and exhibit a quite different property: for there the ice firſt forms at the bottom; which is then lifted up by the water, where it remains till the whole river is entirely frozen up; and at times ſo much ice comes gradually in addition to it, that the water can ſcarcely find a free paſſage beneath it. Some derive the cauſe of this either from the quality of the beds of the rivers there, which univerſally conſiſt of chalk-ſtone; or from the frigidity of the ſoil, which all the ſummer through never thaws to a greater depth than two arſhines.

The froſt, and ſtill more the quantity of ſnow in connection with it, is of infinite advantage to the empire, as by that means the land-carriage is inconceivably facilitated. Many provinces could neither procure the neceſſaries of life, nor turn their own products into money, were it not for the froſt and ſnow. No ſooner is the ſledge-way formed, than all the country roads are covered with carriages. In ſeveral diſtricts, maſts, balks, firewood, &c. can only be fetched in the winter, eſpecially from marſhy foreſts. What immenſe quantities of flax, hemp, tobacco, deals, tallow, &c. are brought by ſledgeway from the diſtant provinces of Ruſſia to the ports of the Baltic! One ſingle winter ſo mild as to produce no ſnow, would in many regions put a total ſtop to

to commerce, as well foreign as domeſtic. In the winter from November 1789 to March 1790, the weather being for the moſt part mild, and but little ſnow falling, ſeveral provinces ſuffered great injury. Much of their products could not be conveyed to the maritime towns. Great quantities of the proviſion brought for the ſupply of St. Peterſburg was ſo ſpoilt that it was thrown away. In ſeveral towns, both inland and on the ſea-coaſts, there was a real ſcarcity of firing and other neceſſaries: wood that had been ſold at from one to two rubles the fathom, was not now to be had for leſs than double that price. Numbers that were under contracts for the delivery of brandy were very badly off. — Moreover, there are regions where the greater part of the year may properly be called winter, others where the winter laſts but a few weeks; ſome where ſtorms are very frequent, others where they are extremely rare: of the latter ſort are the parts about the frozen ocean.

Buſching remarks, that corn ripens in few places above the 60th degree of polar elevation. This however admits of ſome limitation: corn is indeed grown far higher than the 60th degree, though in thoſe parts the huſbandman runs great hazard of ſeeing his hopes entirely defeated by the froſt of one ſingle night, which ſometimes happens

happens in July or Auguſt. For inſtance, this is frequently the caſe at Meſen, which lies in 65 deg. north lat. where barley is ſown, which comes up finely, but ſeldom ripens. It grows to almoſt the uſual height, and bears large ears; but does not come to maturity above once in 20 or 30 years: however, it is ſown every year for the purpoſe of getting fodder for the cattle. Corn comes from Archangel.

From ſeveral phænomena mentioned in the travels of the academicians, one would be tempted to ſuppoſe, that even the north of Siberia muſt formerly have had a much milder climate, or have undergone a moſt ſtupendous revolution in nature. As a proof of this we may adduce the ſkeletons of elephants and other large animals found within the earth on the ſhores and rivers there. Theſe bones and teeth have been deſcribed by that learned and ingenious traveller M. Pallas. A ſkeleton of this kind, which we have ſeen, was found, among others, ſeveral years ſince on the ſhore of the Irtyſh, ſome fathoms deep in the earth, where the river has waſhed away part of its bank. In all theſe places they are known by the name of mammot's-bones. Great numbers of them have been ſent to Peterſburg, where they may be ſeen in the muſeum of the academy of ſciences; but they

are

are not well put together. If these animals lived once where their bones are discovered, it is certain that these countries must formerly have had a very different climate. Did they go thither while alive? What inducement led them? Have they been wafted thither after death? What a flood must it have been that carried them! — Or, are they bones of sea-animals?

A general division of the whole empire may be made into three great regions, in regard to weather, and the consequent growth of the productions of nature, viz.

1. The region lying above the 60th deg. and extending to the 78th degree of north lat.

2. The region lying between the 50th and the 60th degree of north lat.; and,

3. The region which lies to the south of the 50th, and reaches to the 43d degree.

The first is the rudest and coldest. In it are contained the greater part of the governments of Irkutsk, Tobolsk, and Vologda; the entire governments of Archangel, Olonetz, and Viborg, with part of those of Perme, Novgorod, and St. Petersburg *. All these regions lie in a very cold

* By the observations of the academician Euler there are even at St. Petersburg only two months in which it never snows. — In order to characterise the weather of the northern

cold climate, having a winter extremely ſevere, eſpecially Siberia.

The

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northern region we will give a ſhort extract from the meteorological remarks publiſhed by M. Fries, of the territorial town of Uſtiug Veliki in the government of Vologda. This town lies in 60° 50′ north latitude, and 62° 10′ eaſt longitude from Ferro, 516 miles from the neareſt ſhore of the frozen ocean, and 1002 miles from St. Peterſburg. The mean heat and cold here is: above Reaumur's freezing-point in the month of April — till September; below the freezing-point in the month of October — till March. The mercury in Reaumur's thermometer, in the ſingle month of June alone, falls never below 0, and only in January never riſes above 0. The cold increaſed at times ſo late as in the middle of April to 30 degrees, and the quickſilver may, ſometimes ſo early as November, and again in the firſt days of March, be hammered. In every winter are 120 days, in which the cold is more than 5 degrees; and, of them, 65 days in which it exceeds 10 degrees; yet the ſummer has more hot, than the winter has cold days. The thermometer ſtood, upon an average of ſeveral years, the whole day above 0 on 152 days, and below 0 on 150; conſequently there were 63 days on which it ſtood alternately above and below 0. The rivers are navigable about the 10th of May. At the end of that month the ſummer-corn is ſown, and about the middle of June the fields are manured for winter-ſowing; the harveſt is commonly in Auguſt. The trees ſhed their leaves ſometimes ſo early as the 10th of Auguſt; but uſually about the 20th.

Uſtiug Veliki lies 15½ degrees more to the north than St. Peterſburg, the quickſilver froze in open air the

4th

The second region, in regard of its fertility, may be called the temperate; in one half whereof, that is, from the 55th to the 60th degree, the weather, though pretty severe and cold, yet allows the fruits of the field and the orchard to grow. In the other half, namely from the 50th to the 55th degree, the climate is much milder still, affording, beside the usual products, others which do not succeed in the former. The whole of this large, beautiful and important region comprehends the governments of St. Petersburg, Reval, Riga, Polotzk, Mohilef, Smolensk, Pscove, Novgorod, Tver, Yaroslaf, Kostroma, Viætka, Permia, Kolhyvane, a good portion of Irkutsk and Usa, the governments of Mosco, Vladimir, Nishney-Novgorod, Kazan, Kaluga,

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4th of November 1786, during a cold of 30½ degrees of Reaumur's thermometer; the 1st of December at 40 degrees, it fell the same day to 51, and the 7th of December even down to 60. The quickfilver then froze to a solid mass, so as to bear beating with a hammer, in a warm room, several times before any pieces flew off from it. See the observations of M. Fries, in Crell's annals, 1787, part x. p. 318, & seq. — At Krasnoyarsk the quickfilver froze at 235 and 254 deg. of de l'Isle's scale. Pallas, tom. iii. p. 419. — In Solykamsk, in 1761 it fell in the said thermometer of de l'Isle quite down to 280 deg. Examen du voyage de M. de la Chappe d'Auteroche, p. 105.

Tula,

Tula, Riazan, Voronetch, Tambof, Penſa, Simbirſk, Kurſk, Orel, Novgorod-Sieverſk, Tſchernigof, and the greater part of Kief, Kharkof, and Saratof.

The third is the hot climate, yielding products, e. g. wine and ſilk, which the two former do not. In this lie Taurida, Ekatarinoſlaf, the major part of Caucaſia, and a part of Kief, Kharkof, Voronetch, Saratof, Kolhyvane, and Irkutſk.

In Aſtrakhan the heat is ſometimes ſo intenſe that the mercury in Fahrenheit's thermometer is up at 103½, and rain is then ſo rare, that without artificial irrigation all the plants are withered. — Among the fineſt and moſt fertile tracts of the ſouthern diſtricts are the caucaſian territory of the government of Caucaſus and the mountainous part of the province of Taurida. The region about the Terek and the foot of the caucaſian mountains bear the beſt wheat, the choiceſt orchard-fruits, wild and cultivated vineſtocks, mulberry-trees, wild olives, figs, cheſnuts, almond and peach trees, ſaffron, &c. — Of the mountainous part of the province of Taurida, M. Pallas, in a late publication, gives ſo animated and delightful a picture that I cannot reſiſt the temptation to inſert a tranſlation of it here, eſpecially as it is not at all known in England.

" One of the mildeſt and moſt fertile regions " of the empire is the beautiful ſemicircular and " amphitheatral vale formed by the tauridan " mountains on their ſide along the ſhores of " the Euxine. Theſe vallies which are bleſſed " with the climate of Anatolia and the leſſer " Aſia, where the winter is ſcarcely ſenſible, " where the primroſes and ſpring-ſaffron bloom " in February and often in January, and where " the oak frequently retains its foliage the whole " winter through, are, in regard to botany and " rural œconomy, the nobleſt tract in Taurida " and perhaps in the whole extent of the empire. " Here every where thrive and flouriſh in open " air the ever-verdant laurel, the oil-tree, the " fig, the lotus, the pomegranate, and the " celtis, which perhaps are the remains of gre- " cian cultivation; with the manna-bearing aſh, " the turpentine-tree, the tan-bark-tree, the " ſtrawberry-tree from Aſia minor, and many " others. This laſt particularly covers the " ſteepeſt cliffs of the ſhore, and beautifies them " in winter by its perpetual foliage and the red " rind of its thick ſtem. In theſe happy vales " the foreſts conſiſt of fruit-trees of every kind, " or rather the foreſt is only a large orchard left " entirely to itſelf. On the ſhores of the ſea " the caper-buſhes propagate themſelves ſponta-

" neouſly;

" neouſly; without the aſſiſtance of art the
" wild or planted vine-ſtems climb the loftieſt
" trees, and, twining with flowery creepers,
" form feſtoons and hedges. The contraſt of
" the orchards and the rich verdure with the
" beautiful wildneſs which the adjacent moun-
" tains and rocks preſent, which in ſome places
" riſe among the clouds, and in others are
" fallen in ruins; the natural fountains and caſ-
" cades that agreeably preſent their ruſhing
" waters; laſtly, the near view of the ſea,
" where the ſight is loſt in the unbounded
" proſpect: all theſe beauties together form ſo
" pittoreſque and delightful a whole, that even
" the enraptured muſe of the poet or the painter
" would be unable to conceive any thing more
" charming. The ſimple manner of life of the
" good-humoured highland Tartars who inhabit
" theſe paradiſaical vales; their turf-covered
" cottages, ſome hewn in the rock on the
" mountain's ſide, others placed amidſt the
" luxuriant foliage of the ſurrounding orchards;
" the roving flocks of goats and ſheep clinging
" to the declivities of the ſolitary rock; the
" ſound of the paſtoral flute, re-echoing its
" plaintive tones among the hills — every thing
" here renews the image of the golden age, its

" innocence and ſimplicity; every thing con-
" tributes to cheriſh the propenſity to an artleſs,
" retired, and rural life, and we for a ſecond
" time gain a fondneſs for the abode of mortals,
" which the horrors of war, the ſordid purſuit
" of wealth in great cities, and the luxury
" which fills the train of all the ſocial vices,
" render ſo ſoon intolerable to the ſincere vota-
" ries of wiſdom *.

" In theſe inchanting vallies, to the benefit
" of the empire, which no where, in its whole
" extent, poſſeſſes ſo fine a climate, might the
" uſeful products of Aſia minor, and of the
" ſouthern parts of Europe, be made indige-
" nous. The ſuperior kinds of fruits may be
" produced here without trouble, and are for
" the moſt part ſo already. The beſt kinds of
" olive and fig-trees may be cultivated here;

* To the generality of readers it may not be a matter of indifference to learn that the philoſopher from whoſe pen this paſſage proceeds, reſides at preſent, according to his wiſh, in the country the beauties whereof he here paints in ſuch warm and poetical colours. As the health of this famous naturaliſt rendered his living in a warm climate neceſſary, on his requeſt to the late empreſs he obtained not only immediate permiſſion to chooſe for himſelf a place in her dominions, but alſo, on his pitching upon Taurida for that purpoſe, an eſtate in that province, and to the forming of his eſtabliſhment a preſent of ten thouſand rubles.

" and

" and even the ſeſamum plant never decays.
" Orange, lemon, and citron trees, and parti-
" cularly the cedrat, the moſt excellent ſpecies
" of them, would bear the winter extremely
" well with a little care. The vine would be
" conſtantly improving, if but a judicious ſe-
" lection were made of the ſtems for planting,
" if greater attention were paid to the various
" effects of the ſoil and ſituation of the vine-
" yards, and if more care were had in working
" the muſt and keeping the wine. For the uſe of
" the apothecaries and manufacturers a number
" of excellent remedies and dyes might be pro-
" duced, which are at preſent brought from the
" iſles of the Archipelago, from Greece, from
" Aſia minor, and Perſia; ſeveral of them are
" now ſeen there growing wild. Likewiſe many
" hard and uſeful kinds of wood, eſpecially
" coloured, fit for inlaid work, might here be
" propagated: perhaps in ſome tracts even the
" ſugar-cane would thrive.

" On the whole, the botanical riches of the
" mountainous part of the peninſula of Taurida
" are ſo great and remarkable, that the num-
" ber of thoſe plants alone, which are no
" where elſe to be found in the ruſſian empire,
" amounts to ſeveral hundreds, among which

" is a conſiderable variety of ſpecies entirely " new*."

But Mr. Hermann ſays, if we would divide the empire more accurately by its climates, it falls properly into four regions, each of which contains the governments as follows:

The VERY COLD region, from 60 to 78 deg. N. lat.] Vyborg, Olonetz, Archangel, the greater part of Irkutſk, Tobolſk, and Vologda, and a part of Perme, Novgorod, and St. Peterſburg.

The COLD region, from 55 to 60 deg. N. lat.] Reval, Riga, Polotſk, Pſcove, Tver, Moſko, Yaroſlaf, Vladimir, Koſtroma, Viætka, the greater part of Perme and Kazane, and a part of Irkutſk, Kolhyvane, Ufa, Sinbirſk, Niſhney-Novgorod, Kaluga, and Smolenſk.

The MODERATE region, from 50 to 55 deg. N. lat.] Moghilef, Tchernigof, Orel, Kurſk, Toola, Tambof, Penza, the greater part of Kief, Kharkof, Voronetſh, Riazane, Saratof, Kaluga, Sinbirſk, Ufa, Kolhyvane, and a part of Irkutſk, Kazane, Niſhney-Novgorod, and Smolenſk.

* Phyſical and topographical picture of Taurida, extracted from the journal of a journey made in 1794, by P. S. Pallas, p. 33—36.

The HOT region, from 43 to 50 deg. N. lat.] Tavrida*, Ekatarinoſlaf, the greater part of Caucaſia, and a part of Kief, Kharkof, Voronetſh, Saratof, Ufa, Kolhyvane, and Irkutſk.

Theſe four ſo very different regions in regard of weather, we muſt bear conſtantly in mind, in

* Tavrida has a very agreeable climate. For almoſt nine months in the year the inhabitants enjoy fine and warm weather, and Nature here requires ſcarcely three months for recruiting her vigour. The ſpring uſually begins with March; and commonly the greateſt heat is from the middle of May to the middle of Auguſt. This is generally ſo violent, that it would be very dangerous but for the wind that blows regularly every day from ten in the morning till ſix in the evening, which make it very ſupportable. Thunder, accompanied by heavy ſhowers of rain, is here alſo not unfrequent, whereby the air is ſeaſonably cooled. September and October are generally the fineſt months. The autumnal weather here firſt appears about the middle of November. The froſt comes in December and January; but it is very moderate, and ſeldom laſts above two or three days. However, it is to be remarked, that the flat part of this country differs from the mountainous in this, that heat and cold are commonly greater in the former, and rain and ſnow more rare. In general through all the diſtricts of Tavrida, a few places upon the Sibaſh excepted, the air is reputed to be very healthy. — About Kurſk, in the Ukraine, all kinds of fruit, arbouſes, melons, and apples, are ripe in Auguſt, and the corn is by that time already cut, and got in. The rivers freeze towards the cloſe of November and in December, and in March are again free from ice. Suyef's travels.

ſpeaking of the climate of the ruſſian empire. Hence we ſee that there are governments, which have the climates of two; others, as Kolhyvane, of three; and the government of Irkutſk even of all the four regions. Whatever Nature produces under theſe meridians, Ruſſia either has or may poſſeſs; it may boaſt of advantages to which no other ſingle empire or country of Europe can pretend.

Theſe regions being ſo diverſe, various alſo muſt be their weather, the alternation of ſeaſons, and other phænomena of the atmoſphere. While, in one region, the warm and genial breezes of the ſpring are coming on, in others the ſeverity of winter ſtill prevails; and there are mountains, in the long chains of Ural, and yet more in thoſe of Altai and Sayane, which are never free from ice and ſnow. So likewiſe there are ſeveral promontories, in the frozen ocean, whence, as far as the eye can reach, the water is covered with ice even in the height of ſummer, and rivers which are ſcarcely free from it for two or three months in the year. It may in general be affirmed, that in many diſtricts of the FIRST region there is hardly any ſummer; for the three or four months in which it does not ſnow in ſome diſtricts ſcarcely deſerve that name. However, it is an obſervation, confirmed by repeated

repeated experience, that the farther a diſtrict lies towards the eaſt, ſo much is their weather proportionably colder. The fruits, for example, that come to maturity beneath and above the 60th degree N. lat. in and round St. Peterſburg, and in the government of Vyborg, are not produced under the ſame latitude in Siberia. Probably the proximity of the mountains, and the cold north winds blowing from the frozen ocean, are partly the cauſe of this difference, to the diſadvantage of the latter. In many of the northernmoſt moraſſes the ice does not diſſolve to above the thickneſs of a quarter of an arſhine. — Even the weather of St. Peterſburg, by reaſon of its ſituation ſo far to the north, is rude enough, and, from its vicinity to the ſea, unſettled and unfriendly. The cold during the winter months is here very intenſe.

A high northern ſituation, in a low plain covered with ſwamps and woods, interſected by a number of large rivers, renders the climate cold, rude, and, in ſome circumſtances, ſingular. The imperial academy of ſciences, from its firſt eſtabliſhment in 1725, has kept regular obſervations of the weather; and the freezing of the Neva has been annually noticed from 1718, together with the day on which the ice broke up. By theſe obſervations it appears that it happens upon

upon an average of one year with another on the 14th of November.

The ſpring has in general much froſt, ſnow, and rain. The month of March, old ſtyle, which muſt be all along underſtood, as it is the ſtyle of the country, is always a winter month, with bright days. According to the average of the obſervations made by the academy during ten years, March has 10 bright, 8 cloudy days, 2 days of rain, and 11 of ſnow.

April, during the ſame period of ten years, has upon an average annually 11 bright, 8 cloudy, 4 ſnowy, and 7 rainy days. In this month the ſwallows appear, the buds of the trees open, and the vernal flowers are ſeen. — Moſt commonly the ice of the Neva breaks up in April.

May, upon an average of ten years, has 13 bright, 5 cloudy, and 13 rainy days: neither is it entirely without ſnow. It is not unuſual for the laſt half of this month to be raw and boiſterous, whereby vegetation is much checked, and the ſummer ſhortened. But, as it often has days of very ſevere cold, ſo, on the other hand, as in the years 1729, 1749, 1759, 1766, and 1767, the hotteſt days were in the month of May.

The ſummer is moſtly fair and fine. Its longeſt day is 18 hours and an half; and in the evening twilights,

twilights, which are uncommonly luminous, it is eaſy to read or write. In general the very ſultry days are but few; and theſe are amply compenſated by the cool evenings, nights, and mornings. Some ſummers, however, are very wet and cold: and, in the country, now and then, they experience nightly froſts.

According to the ten years average taken by Mr. Kraft, the month of June, the 9 firſt days whereof belong to the ſpring, has 9 bright, 8 cloudy, and 13 rainy days.

July, 13 bright, 4 cloudy, and 14 rainy days. The corn harveſt uſually begins about the 25th of July.

Auguſt has 8 bright, 7 cloudy, and 16 rainy days.

The autumn has rarely many bright days, but is moſtly cloudy, wet, and boiſterous. Such a fine autumn as that of the year 1789, and in general ſuch a fine year throughout, very ſeldom happens.

On an average of ten years, the month of September, the 9 firſt days whereof belong to the ſummer, has only 5 bright, 8 cloudy, and 16 rainy days; on one day there was even a fall of ſnow.

October has 4 bright, 9 cloudy, 13 rainy and ſnowy days.

November

November is commonly wintry weather throughout. According to the calculation of profeſſor Kraft, on an average of ten years, it has annually 5 bright, 10 cloudy, 4 rainy, and 11 ſnowy days. In November the Neva is uſually covered with ice.

The winter is always ſevere; and, as the atmoſphere is for the moſt part dry, even in ſnowy weather, it is ſo far advantageous to health, that the feweſt ſickneſſes and deaths of all the year are obſerved to happen in this ſeaſon. Indeed, ſo far from being unwholeſome, this dry cold, if not ſo extreme as to be oppreſſive, gives life and ſpirits both to man and beaſt. Its ſhorteſt day is only five hours and a half; and, if about this time the days be cloudy, though a great light proceeds from the ſnow, yet it is but for a ſhort time that candles can be diſpenſed with. Not only the Neva, but alſo the vaſt Ladoga lake, the Peipus, the Cronſtadt gulf, and generally even the gulf of Finland, as far down as the iſlands, are every year covered with ice three quarters of an engliſh yard in thickneſs.

According to the foregoing remarks of the academician Kraft, on an average of ten years, December, the 9 firſt days whereof are to be reckoned to the autumn, has only 3 bright, 9 cloudy, 16 ſnowy, and 3 rainy days.

January

January has 8 bright, 11 cloudy, 11 ſnowy, and 2 rainy days.

February has 8 bright, 6 cloudy, 12 ſnowy, and 2 rainy days.

By this average then the inhabitants of St. Peterſburg have annually 97 bright days.

In like manner, the reſult of the accurate obſervations for ten years on the quantity of rain and ſnow falling at St. Peterſburg, was found to be, that the mean annual duration of rainy and ſnowy weather is 42 times 24 hours, or ſomewhat leſs than the ninth part of the year. From a ten years' obſervation it was ſeen that it rains for 103 days, and ſnows for 72; and that, if we divide the year into twelve equal parts, one fourth part is fair weather, one third rainy weather, and one fifth part ſnowy weather. The whole quantity of rain and ſnow water taken together which fell within one half-year, is obſerved to be in the following proportions:

January -	0,979	July - -	2,760
February -	0,979	Auguſt -	2,671
March -	0,801	September	3,473
April - -	1,246	October -	2,493
May - -	1,335	November -	1,513
June - -	3,116	December -	0,079

Total, 22,345 engliſh inches.

The height of the annually falling rain and melted ſnows, dew, hoar-froſt, (not reckoning the moiſture of cloudy days and hail,) roſe during

during ſomewhat more than twenty years in which it was obſerved by the academy, annually from 12 ½ to 26 ¾ Paris inches; that is, ſo high would the ſurface of the earth have been covered with the falling water, if it had remained where it fell, undiminiſhed by evaporation and the imbibing of the earth. According to another obſervation of Mr. Kraft, the mean number for one year amounts to 20 $\frac{11}{12}$ inches. The ſnow-water ſcarcely forms the third part of this quantity. In London the height of the yearly falling water, upon an average, is 18 ¼ inches, in Paris 17 inches, in Berlin 19 ¼ inches, at Abo in Finland 23 ¾ inches. The ſame learned and induſtrious academician has alſo calculated the height of the falling atmoſpheric water in every month, upon an average of ſeveral years.

	Inches.	Lines.		Inches.	Lines.
January	0	11	July	2	7
February	0	11	Auguſt	2	6
March	0	9	September	3	3
April	1	2	October	2	4
May	1	3	November	1	5
June	1	11	December	0	11

September is therefore the wetteſt, as March is the drieſt month.

The cold and its effects are here very remarkable. There are annually from 150 to 190 days of froſt, the ſeverity and continuance of which freeze the ground every winter from two to two and

and a half, and ſometimes even three feet deep. The ice of the Neva is from twenty-four to thirty-ſix, but generally twenty-eight inches thick. It is curious to obſerve, that, though this thickneſs of the ice is formed by the ſheets of ice lying horizontally on one another, yet the huge blocks of it that are cut out for filling the ice-cellars, on being left expoſed to the ſun, fall to pieces in perpendicular ſpiculæ, each of the thickneſs of one's little finger. So likewiſe in the ſpring, by preſſing on a walking-ſtick, while the ice is ſtill of its primitive thickneſs, the ſtick will go through, becauſe it puſhes down one or more of theſe ſpiculæ from their connection with the reſt.

The covering of the Neva with ice, and the breaking up of it, are remarkable phænomena. When the ice is ſetting-in, as it is called, ſmall detached flakes of ice are ſeen floating down the current, which ſoon grow into large fields, and acquire ſo great a momentum, that the bridges muſt be haſtily taken aſunder, to prevent their being carried away by the ice, a diſaſter which has happened more than once. Theſe large plains of ice continue for a day or two paſſing with the current, while the boats are ſeen rowing between them; till all at once the floating ice ſtops, either by the gulf being already cloſed be-

low, or the flakes of ice freezing together: when immediately foot-paſſengers, who have been waiting on the ſhores for this happy moment, go over in all ſafety. Nothing is more common than to ſee boats croſſing the river, and, in two hours afterwards, to behold hundreds of people going over on foot.

No leſs rapid is the departure of the ice. In the ſpring, the firſt indication of this approaching event, is the ſtanding of the ſnow-water on the ice; then the ice becomes more porous, or divides into ſpiculæ, lets the water through, and becomes of a blackiſh colour. At length it parts, while the roads that have been well trod during the winter ſtill remain; ſo that often foot-paſſengers are ſeen on theſe roads, and between them and the floating ſheets of ice, boats in great numbers paſſing and repaſſing. By the force of the current, and ſhocks received from the floating ice, at length the roads give way; the ice continues to fall down with the ſtream for a day or two to the gulf, and the whole river is clear. A week or a fortnight after this, the ice of the Ladoga comes down; which, according as the wind may happen to be, continues a couple or more days, ſometimes as many weeks, and renders the atmoſphere uncommonly chill.

The

The ice and the cold are of ſervice to the inhabitants in various ways. Diſtances are much ſhortened by their means, inaſmuch as people, horſes, and carriages of all ſorts, and of ever ſo great burden, can croſs the Neva, and the other rivers, lakes, and canals, in all places and directions: and the Cronſtadt gulf ſupplies, in ſome meaſure, the want of navigation during the winter, by the tranſport of commodities of every denomination over the ice. As ice-cellars here are a neceſſary of life, for keeping proviſions of all kinds during the ſummer, ſo every houſe in every quarter of the town is provided with one of them, to be filled with large blocks cut out of the river. This operation generally takes place about the beginning of February. The ice alſo promotes the pleaſure of the inhabitants by giving them an opportunity for the diverſion of ſledge and horſe-racing, and for that of the ice-hills ſo much admired by the populace, and of which I ſhall ſpeak more at large hereafter. The weight of theſe ice-hills, together with that of a multitude ſometimes of 5000 or 6000 perſons ſtanding about them on holidays, give the ſpectator a ſurpriſing idea of the ſtrength and ſolidity of the ice.

What may be executed in ice was ſhewn by the Ice Palace which the empreſs Anna cauſed

to be built on the bank of the Neva in 1740. It was conſtructed of huge quadrats of ice hewn in the manner of free-ſtone. The edifice was 52 feet in length, 16 in breadth, and 20 in height. The walls were three feet thick. In the ſeveral apartments were tables, chairs, beds, and all kinds of houſehold furniture of ice. In front of the palace, beſides pyramids and ſtatues, ſtood ſix cannons carrying balls of ſix pounds weight, and two mortars, of ice. From one of the former, as a trial, an iron ball with only a quarter of a pound of powder, was fired off. The ball went through a two-inch board at 60 paces from the mouth of the cannon; and the piece of ice artillery, with its lavette, remained uninjured by the exploſion. The illumination of the ice palace at night had an aſtoniſhingly grand effect.

That the reader may be able to judge whether the climate here has become more ſevere or more mild, in a period of ſixty years, or whether it has continued the ſame, I will ſubjoin the meteorological table from the works of the academy of ſciences; but, for brevity's ſake, take only from 5 to 5 years.

Years.

Years.	Reaumur's thermometer. Greateſt heat.	Greateſt cold.	Rain and ſnow days.	Ice broke up, earlieſt and lateſt.	Standing of the ice, earlieſt and lateſt.
From 1726 to 1730 incl.	Not obſerved.		47	Mar. 27. Apr. 14.	
1731 to 1735.	Not obſerved.		35	Mar. 26. Apr. 24.	
1736 to 1740.		21 deg.	38	Mar. 25. Apr. 26.	Oct. 24. Nov. 14.
1741 to 1745.	21 deg.	22			
1746 to 1750.	27	22		Mar. 25. Apr. 25.	Oct. 23. Nov. 20.
1751 to 1755.	24	22		Mar. 26. Apr. 27.	Nov. 7. Nov. 20.
1756 to 1760.	22½	33		Mar. 27. Apr. 21.	Nov. 4. Nov. 19.
1761 to 1765.	22	27		Mar. 28. Apr. 23.	Nov. 8. Nov. 23.
1766 to 1770.	21	33	73	Apr. 1. Apr. 15.	Oct. 20. Dec. 1.
1771 to 1775.	21½	28½	166	Apr. 5. Apr. 19.	Oct. 31. Nov. 12.
1776 to 1780.	22	32	182	Mar. 31. Apr. 19.	Nov. 1. Nov. 21.
1781 to 1785.	22	30	85	Apr. 7. Apr. 22.	Nov. 6. Nov. 27.
1786.	23	23	185	Apr. 10.	Oct. 26.
1787.	25 1/10	25 1/10	215	Apr. 13.	Nov. 14.
1788.	26¾	24½	183	Apr. 9.	Nov. 6.
1789.	24	25½	138	Apr. 19.	Nov. 14.

The height of the barometer during this time was never higher than $30\frac{95}{100}$, and never lower than $26\frac{2}{100}$ inches.

The Neva never broke up before the 25th of March, and never later than the 27th of April. The earlieſt ſtanding of the ice was the 20th of October, and the lateſt the 1ſt of December. Its ſtanding and breaking up determines our ſummer and winter.

On the breaking up of the ice, when the river is ſo far open as to be navigable for boats, the event is announced to the town by the firing of three cannons from the fortreſs. Upon this the ſurveyor of the city-wharfs goes in a barge with the city-flag flying, accompanied by a number of other barges, to the fortreſs, and ſalutes it with ſeven guns, on which the fortreſs returns the ſalute with five. From the fortreſs he then proceeds to the imperial winter-palace, where, on being come near the ſhore, he again makes another diſcharge of cannon, which is followed by three cheers from the crew, repeated by the companies of the numerous barges. This done, they all return in proceſſion to the place from whence they came. Previous to this ceremony, no boat may dare to ſhew itſelf on the Neva; but from that moment any one may paſs upon it that will: and ſo long as the Neva continues open, the riſing and ſetting of the ſun are noticed by a gun from

from the fortreſs. But this is diſcontinued during all the time that the Neva is covered with ice.

The ſevere cold here has not that violent benumbing effect either on man or beaſt as people in ſouthern climates might imagine. This ſeems to be principally founded on the dry quality of the air during the froſt, and perhaps in ſome meaſure may be owing to habit, by which both men and the inferior animals are hardened to the climate. However this be, from the dryneſs of the atmoſphere, foreigners, according to the univerſal teſtimony of them all, ſuffer much leſs from the cold, than they do from leſs degrees of it in other countries. The drivers and their horſes, from being ſeaſoned to the cold, feel little or no inconveniency in purſuing their employment through the ſtreets of the town and along the roads, though the beards of the former and the muzzles of the latter are covered with hoar-froſt and little icicles from the congelation of their breath; and in the ſevereſt colds they travel all day without receiving any detriment. Nay, even in from 20 to 24 degrees of Reaumur, women will ſtand rincing the linen through holes in the ice, four, five, or ſix hours together, often barefoot, with their hands dipping in the water all the while, and their draggled petticoats ſtiff with ice.

The heavy gales of wind which prevail in these parts, and more especially in the gulf of Finland, have frequently occasioned much distress, by the swelling of the Neva, and the consequent calamitous inundation of the city. However, it is consoling to find, that from the repeated observations which have been made, these inundations are no longer so dreadful as formerly, because the overflowing of the river to about the height of six feet above its ordinary level, which formerly used to lay the whole town under water, does not any more produce that effect, except on the lowest quarters of it; a circumstance arising hence, among other causes, that, by the perpetual increase of buildings, the ground is become gradually higher. — The first inundation we know of happened in the year 1691, an account of which is given by Weber, the minister from the elector of Hanover, from the report of some fishermen who lived at Nienshantz, at that time a swedish redoubt on the Neva. About this period, it is pretended, the water used to rise every five years. As soon as the inhabitants of the parts adjacent perceived the storm coming on with unusual vehemence, which, from sad experience, they knew to be the forerunner of one of these inundations, they immediately took their huts to pieces, tied the balks of them together in the form of a float, fastened them to the topmost

branches

branches of the higheſt trees, and ran as faſt as they could to the Duderhof-hills, fifteen verſts from their place of abode, where they remained till the water had ſubſided. — From various obſervations made on this ſubject, the following concluſions have been drawn: the higheſt ſwells, namely, above ſix feet high, uſually happened in the four laſt months of the year. Snow or rain have never had any remarkable effect upon them. The heaping of the ice at the mouth of the Neva often cauſes ſome floodings; but the principal cauſes of the overflowings of this river are the violent ſtorms and winds from the ſouth-weſt, or weſt, or north-weſt, which commonly are prevalent towards the autumnal equinox, and the elevation of the water is always in proportion with the violence and duration of theſe winds. In a word, the circumſtances that moſtly contribute to make the Neva overflow, are, if at the time of the autumnal equinox, three or four days before or after the full moon or new moon, when ſhe is near her perigæum, a vehement north-weſt wind drives the water of the north ſea during the flood and ebb into the Baltic, and at the ſame time with it or ſuddenly after it a ſouth-weſt wind blows over the Baltic or the gulf of Finland. All theſe circumſtances united, for example, at the great inundation in 1777.

It happened two days before the autumnal equinox, four before the full moon, two after its tranſit through the perigæum, and with a ſtorm from the ſouth-weſt, previous to which there had been ſtrong weſt winds in the north ſea, and vehement north winds at the mouth of the Baltic. — The moſt memorable of theſe floods, of which we have any account, were the following: in 1715, which, though the day is not noticed, yet went over almoſt all the bulwarks. In 1721, the 5th of November, exactly at the full of the moon. In 1723, ſome day of October, alſo at full moon, when the flood roſe 3 inches higher than in 1721. In 1725, the 16th of November. In 1726, the 12th of November, the day after full moon, from 8 o'clock in the morning till mid-day, when the water roſe to $3\frac{1}{2}$ arſhines above its ordinary level, and one fourth and a half or eight decimal inches higher than in 1721. In 1727, the 21ſt of September. In 1728, the 3d of Auguſt and 3d of November. In 1729, the 3d and the 12th of October, the day after the new moon, about 10 o'clock in the morning, with a violent ſtorm from the ſea. In 1732, the 15th of September. In 1733, the 6th of September, the 8th and 31ſt of October, and the 12th of December. In 1735, the 26th of February; in the ſame year again in the night between

between the 9th and 10th of October, with a ſtorm from the north-weſt which held the ſame courſe till noon, ſo that the overflowing water, by about 8 o'clock, had deluged every quarter of Peterſburg to the height of an ell, and did not abate till afternoon. In 1740, the 12th of September, the day of the equinox, when the flood roſe 2 arſhines and 3 verſhoks above the bed of the river. In 1752, the 22d of October, with a flying ſtorm, from the ſouth-weſt, verging to the weſt, which about 10 at night ſo raiſed the water, that it came nine feet and an half above its uſual ſtation, and inundated all the iſlands and the ſeveral quarters of the town (the Stickhof and the part about the Neſſkoi monaſtery excepted) with tremendous violence, and cauſing great damage to the inhabitants; but preſently after midnight it ſubſided with equal rapidity. At this flood it was very remarkable, that, on the 25th of October, with a ſtrong gale from the S. S. W. the water, which had been pretty high in the neareſt ſtreets, ſwelled on the 26th with a ſouth-weſt wind ſo as to overflow the whole city, yet, foraſmuch as the violence of the ſtorm turned in time to the north, overflowed by one arſhine lower than the former day; and, laſtly, that, on the 28th in the afternoon, after the ſtream had returned on the 27th to its ordinary channel,

channel, a new flood, almoſt without wind, ſucceeded, which did again much damage on the Vaſſilly oſtrof, and probably was occaſioned by ſtorms at ſea which had compreſſed the waters of the gulf of Finland. The laſt, and one of the moſt deſtructive inundations, was that in the autumn of the year 1777, and which in ſome reſpects exceeded all the foregoing, as it continued the whole night from the 9th to the 10th of September (therefore three days after the moon was at the full) with an uncommonly low ſtate of the barometer; a violent ſouth-weſt and afterwards weſterly wind raging all the while, which forced the ſtream at 5 in the morning over its banks, and laid all Peterſburg under water in many parts above two ells, but ſpent the moſt of its fury on the Vaſſilly oſtrof and what is called the Peterſburg-ſide, waſhing away fences, bridges, and ſuch houſes as were moſt expoſed to the ſea, forcing up whole acres of foreſt trees by the roots, tranſporting yachts, galliots, and heavy-loaded barks to a great diſtance on the land, and daſhing others to pieces, and certainly would have raged with greater fury, and have committed far more havoc, had not the tempeſt, towards 8 o'clock, when the flood was riſen to more than 10 feet above the common level of the river, and upwards of a foot and a half higher than in

1752,

1752, veered to the north-weſtward and cauſed the decline of the water, which about noon was well-nigh retired from the ſtreets. Were the Baltic ſubject to a conſiderable flux and reflux, the inundations of Peterſburg would be incomparably more terrible, and in all probability not much inferior to the remarkable ſpring-tide at Briſtol, which often, in particular circumſtances, increaſes to 50, or even to 60 feet. However, it is poſſible that ſtorms prevailing in the north ſea during the time of the ſpring-tides, which impel together an extraordinary quantity of water into the Baltic, may remotely contribute to the inundations that happen at St. Peterſburg, when the winds that act to that end combine with theſe circumſtances. — Leſs conſiderable floodings of the Neva are not unfrequent in autumn, riſing to the height of from 5 to 7 feet, and have been remarked to happen ten times only ſince 1752; as, in 1756, the 29th of September, with a ſtorm from the weſt, to 7 feet 3 inches engliſh meaſure; in 1757, the 16th of October, with a ſtorm from the ſouth-weſt, to the height of 6 feet 2 inches; in 1762, the 28th of October, with a ſouth-weſt wind, 5 feet 10 inches; in 1763, the 8th of October, with a ſouth-weſt wind, 5 feet 4 inches; in 1764, from the 6th to the 24th of November, 7 feet 4 inches; in 1765, the 16th of November, in a perfect calm,

calm, 5 feet 6 inches; in 1772, the 31ſt of December, with a ſouth-weſt gale, 5 feet 2 inches.

The aurora borealis is very frequent, and not uncommonly makes its appearance with extremely vivid white coruſcations of light. The year in general produces from 20 to 30 diſplays of thoſe inexplicable phænomena: ſometimes they reckon 40; but in 1762 there were only 2, and in 1731 4 exhibitions of the northern lights.

Storms of thunder and lightning are neither numerous, violent, nor laſting. In 1732 there were only 2; in 1750 but 3; though annually they may be computed at from 6 to 18. At times, however, they do conſiderable damage. Therefore the tower of Peter's church, which was deprived of its ſpire by lightning, the palaces of Gatſhina and Peterhof are provided with conductors, the former on the principles of M. Alb. Euler, of our academy; the two latter were placed under the directions of prof. Kohlreif.

No winds are particularly predominant here, though in one year this, and in another that, is moſt frequent. According to the obſervations kept ſince 1725, there are annually from 10 to 16 tempeſts. Of theſe the moſt injurious to navigation are thoſe that come from the eaſt, becauſe they occaſion the water of the Cronſtadt gulf to be ſo low that no ſhips of burden can come up; the weſtern tempeſts, as before remarked,

marked, are more prejudicial to the city, by cauſing a ſwell of the Neva, and at times inundations.

Hoar-froſts are common, covering and ornamenting the leafleſs branches of the trees, in the winter months, with their extremely beautiful, ſparkling, white, icy cryſtallizations. It but ſeldom hails; not above ſix times in the year — and the hail-ſtones are always ſmall.

The ſudden tranſitions of the air to different temperatures has often been mentioned as remarkable by travellers, with great juſtice. Thus, at Peterſburg, on the 12th of February 1794, they had 13 degrees of froſt; on the 13th, 2 degrees of thaw; the 14th, froſt again; and on the 15th, 19 degrees of froſt, by Reaumur's thermometer.

In the SECOND region the ſummer is indeed likewiſe in many parts ſhort; yet in moſt of them ſo warm, and the days ſo long, that the fruits of the earth uſually come to perfect maturity in a much ſhorter ſpace of time than elſewhere. The winter too, in this region, particularly in the governments of Irkutſk, Tobolſk, Perme, Viætka, &c. for the moſt part very ſevere.

In the THIRD region, there are very extenſive diſtricts; for inſtance, in the governments of Irkutſk, Kolhyvane, and Ufa, where the winter is alſo long and cold. This, however, ariſes more

from the very lofty mountains with which theſe diſtricts abound. But the governments in the european diviſion of Ruſſia that lie under this meridian, moſtly enjoy a ſhort and tolerably temperate winter, and a fine warm ſummer *.

In the FOURTH region the winter is ſhort, and (though in ſome parts of the governments of Irkutſk and Kolhyvane, cold enough) the ſummer warm, often hot, and in many parts very dry †.

The

* In and about Moſko, e. gr. the rivers freeze over in the middle or towards the latter end of November, old ſtyle; and break up in March or the beginning of April. The buds of the birch-trees expand in May, and ſhed their leaves in September. — The river Ural uſually flows, near Gurief, free from ice about the beginning of March.

† M. Falk writes as follows concerning the diſtrict circumjacent to the Terek: "The ſpring is ſhort and very "pleaſant; the ſummer hot, with frequent rains and "ſtorms; the autumn ſhort and dry; the winter ſhort, "clear, and rude." And, of the parts about the Irtiſh: "The climate of the lower region of the Irtiſh, on account "of its eaſtern, and partly northern ſituation, is very "ſevere. The winter is continually keen. The ſummer, "for a great part of it has ſuch a foggy atmoſphere, that "one gets but a very ſmall horizon, and I can frequently "look ſtedfaſtly at the dim orb of the ſun with my naked "eye, as we do at the moon. The ſpring and the autumn "are moſtly bright, but are ſubject to very rapid tranſitions "from pretty warm to biting cold. Falls of ſnow are not "rare in May and September; and, July only excepted, "no month in the year is ſecure from night-froſts. But, "in ſpring, here, as in the quite ſouthern and middle "Siberia,

The immenſe territory of this empire likewiſe naturally forms itſelf into two grand diviſions, by the vaſt Ural chain of mountains interſecting it from north to ſouth; theſe diviſions are very unequal, both as to dimenſions and quality. That on the weſtward, is proper for european Ruſſia; and that lying to the eaſt, aſiatic Ruſſia, or Siberia.

The air, in all the northern governments, or that lie ſomewhat high, is very ſalubrious. The ſame may be alſo affirmed in general of the ſecond

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" Siberia, every thing comes forward with amazing ra-
" pidity." P. 258. — In Omſk, where the Om falls into the Irtiſh, the cold, in 1770, was from 151 to 213 degrees of de l'Iſle. In January 1771, the leaſt cold 160, the greateſt 200 deg. In February from 160 to 205. March the 12th it was at 190, and the 27th at 140 deg. The Irtiſh here breaks up in March, uſually between the 10th and the 20th. — In Kiſliar, and about the whole of the Terek (the moſt ſouthern diſtricts of the ruſſian empire), the S.S.E. and S. winds, from the mountains, are very drying and cold. From 1768 to 1773 the greateſt heat here, according to de l'Iſle's thermometer, was 97 deg. and the greateſt cold 191½ deg. On the 9th of November 1770, a ſmall ſhock of an earthquake was felt there. Guldenſtædt, part i. p. 177. — In Irkutſk, the 9th of December 1772, the thermometer ſtood at 254 deg. and the quickſilver conſolidated in it. Georgi, travels, part i. p. 36.

The Angara there commonly does not freeze till towards the end of December; frequently not till the middle of January, and is already open again by about the cloſe of March, or at fartheſt the firſt days in April.

and

and third regions, excepting only the diſtricts from the Oby down to the Irtiſh, and on the Ui and Ural as far as the Caſpian ſea, where every year thoſe aſthmas prevail which are known under the name of yaſva. — The fourth region likewiſe contains a great deal of low lands, partly ſwampy and partly dry, and ſaline ſteppes, which are certainly none of the healthieſt.

Rains fall in common very copiouſly in the northern and middle governments; though this admits of its exceptions. M. Hermann ſays*, that from the autumn of 1786 till the ſummer of 1788, in which he writes, the weather in all Siberia, and in many of the ruſſian governments, had been ſo unuſually dry, that ſuch a failure of the crops, and ſuch a want of water at the mines, was never heard of before by the oldeſt man alive.

Some of the parts adjacent to ſeas, lakes, and large rivers are often incommoded by thick fogs, but the greater part of the empire enjoys a bright, and but too frequently an air more dry than might be wiſhed.

Moſt of the governments are ſubject to great quantities of ſnow; but not all. In ſome diſtricts, for inſtance about Nertſhinſk, they are uſually but ſcanty in ſnow, though the cold of the winter with them is very ſevere.

* Statiſtiſche ſchilderung von Ruſsland, &c. p. 55.

The

The winds are in ſome parts very violent, eſpecially in Siberia, where reigns a certain tremendous kind of winter-hurricane, which they call burane, and which not unfrequently buries both men and cattle in whirlpools of ſnow and ſand.

Storms, in moſt of the diſtricts, are not ſo frequent, and generally ſpeaking not by far ſo violent, as in other places; neither was any miſchief ever known to have been done by lightning. In the parts to the north, thunder and lightning are even great rarities.

On the other hand, the northern lights are ordinary appearances; and in many of the northern diſtricts, a few months excepted, are, in a manner, to be ſeen daily.

Earthquakes in moſt of theſe parts happen but ſeldom. Yet there have been ſome, felt over Kamtſhatka to the mountains of Altai *.

In the northern diſtricts the days in winter are extremely ſhort; but in ſummer therefore ſo

* In the year 1741 three earthquakes were felt on Bering's iſland; and in 1780 a violent earthquake committed great depredations on the Kurilli iſlands, particularly on the 15th, 16th, and 17th. On the 21ſt of January 1725, and again in 1768 and 1769, earthquakes were felt in Daouria, Irkutſk, &c. and in 1734 at Tomſk. In the vicinity of Baikal lake almoſt every year ſmart ſhocks are felt. Georgi.

much the longer. On the ſhorteſt day, the 10th of December, old ſtyle,

	the ſun riſes,		and ſets,	
In Aſtrakhan,	about 48 min. after	7.	12 min. after	4.
Kief, - - -	7	8.	53	3.
Moſco, - -	37	8.	23	3.
Riga, - - -	47	8.	13	3.
Tobolſk, - -	56	8.	4	3.
St. Peterſburg,	15	9.	45	2.
Archangel, -	24	10.	36	1.

The quality of the ſoil, in this enormous empire, as may well be ſuppoſed, is extremely various. There are entire, and they very extenſive governments, that are full of mountains: but others, in ſtill greater number, that conſiſt of vaſt ſteppes and plains, ſome of which are inexplorable to the eye.

I ſhall conclude this head with a few general remarks made by that diligent and accurate ſurveyor, capt. Pleſchéyéf: "Ruſſia (ſays he) is divided by nature into two great parts by a range of mountains called Ural, which form one continued uninterrupted barrier acroſs the whole breadth of it, dividing Siberia from the reſt of Ruſſia.

"That part of Ruſſia which lies on this ſide the Ural mountains, preſents a vaſt extended plain verging towards the weſt by an eaſy gradation. This plain, from its prodigious extent, has a great

variety

variety of climates, ſoils, and products. The northern part of it is very woody, marſhy, but little capable of cultivation, and has a ſenſible declenſion towards the white ſea and the frozen ocean. The other part of this extenſive plain includes the whole diſtrict along the river Volga, as far as the deſerts reaching by the Caſpian and the ſea of Azof, conſtituting the fineſt part of Ruſſia, which in general is rich and fertile, having more arable and meadow land, than foreſts, ſwamps, or barren deſerts.

"The moſt remarkable, for ſuperior quality and flavour of every kind of fruit and other productions of the earth, is that part which extends towards Voronetch, Tambof, Penza, and Sinbirſk, as far as the deſerts. It every where abounds in an admirably rich ſoil, conſiſting of a black mould, ſtrongly impregnated with ſaltpetre. But that part which commences between the ſea of Azof and the Caſpian, and extending near the ſhores of the latter, runs between the Volga and the Ural, and then ſtretching as far as the river Emba, is nothing but a deſert, level, arid, high, ſterile, and full of ſaline lakes.

"The part lying on the other ſide of the Ural mountains, known by the name of Siberia, is a flat tract of land of conſiderable extent, declining imperceptibly towards the frozen ocean, and by

equally gentle gradations rising towards the south; where at last it forms a great chain of mountains, making the boundary of Russia on the side of China. Between the two rivers Oby and Irtish, and the Altay mountains, runs a very extensive plain, called the Barabinskaia steppe, or the deserts of Baraba, the northern part whereof is excellently adapted to agriculture; but the southern, on the contrary, is a barren desert, full of sands and marshes. The country between the rivers Oby and Yenissey consists more of woodland than of open field; and the other side of the Yenissey is entirely covered with impervious woods, as far as the lake Baikal; but the soil is every where fruitful: and wherever the natives have been at the pains of clearing and draining the grounds, it proves to be rich, and highly fit for cultivation. The parts beyond the Baikal are surrounded by ridges of high, stony mountains. Proceeding farther on towards the east, the climate of Siberia becomes gradually more and more severe, the summer shortens, the winter grows longer, and the frosts are more intense.

"In such temperature of climate, the greater part of Siberia, that is, the middle and southern latitudes of it, as far as the river Lena, is extremely fertile and fit for every kind of produce; but

but the northern and eaſtern parts, being encumbered with wood, are deprived of this advantage, being unfit both for paſturage and culture. The whole of this part, as far as the 60th degree of north lat. and to the frozen ocean, is full of bogs and moraſſes covered with moſs, which would be abſolutely impaſſable, did not the ice, which never thaws deeper than ſeven inches, remain entire beneath it."

Nature of the ſoil.

In this particular a ſtill greater diverſity is obſervable than in climate. Here are delightful and charming regions, where Nature ſeems to have diſpenſed her gifts of every kind with an unſparing hand *; while towards others ſhe has acted ſo like a ſtepmother that all appears deſert and gloomy. We muſt not judge of the country at large from either the one or the other of theſe appearances. If, however, we were to divide the ground and ſoil into claſſes, it might be done in ſomething of the following manner, yet without particular regard to the ſeveral kinds of earth and ſtrata.

* And yet numbers of foreigners ſtill adhere to the fooliſh notion that Ruſſia is entirely a rude country, and has not a trace to ſhew of beautiful Nature.

Arable land.

Under this head we muſt reckon various tracts of land, eſpecially, 1. thoſe that are kept in conſtant cultivation and tillage, ſuch as are every where ſeen in Great and Little Ruſſia, in the provinces bordering on the Baltic, and many others. 2. Such as are only uſed at times, and left quiet for a great length of time. In ſome regions, for inſtance, in Little Ruſſia, about the Don *, &c. where they are looked upon as ſteppes, which if merely ploughed and then ſown, would be productive; in others, for example, in Livonia, Eſthonia, and Ingria, where they are rendered fertile by fire, and are called by the countrymen buſh-lands †. On ſuch parcels of ground, which are either allotted into particular poſſeſſions, or without a proper owner, villages might be gradually erected. In uninhabited diſtricts theſe tracts are moſt frequent. 3. Thoſe that are proper for agriculture, but lie totally unemployed: they wait only for induſtrious hands. There are ſtill plenty of theſe vaſt tracts, where millions of

* The Don kozak takes, in whatever part of the ſteppe he chooſes, a piece fit for cultivation, and beſtows his labour upon it as long as he thinks proper, or as long as its viſible fertility will amply reward his labour.

† See Hupel Liefl. and Eſthl. vol. ii.

men

men might find work and profit, especially in fruitful steppes, and in numberless large forests.

The fertility of all these tracts is very different according to the quality of the soil. In Livonia and Esthonia, from good fields they reap 8, and in successful years from 10 to 12 fold; from indifferent ground about only 3, but from better at times 16 or even more than 20 fold. The harvests about the Don are commonly 10 fold; but towards Tomsk on the Tshumush, and in the whole region between the Oby and the Tom, many fields afford an increase of 25 to 30 fold *; and at Krasnoyarsk the failure of a crop was never heard of: of winter-corn they reap 8, of barley 12, and of oats 20 fold †.

In Little Russia, on the Don, and in many other places, the fields are never manured, only ploughed once, just to turn up the earth, afterwards harrowed, and then sown: more culture, especially dunging, would push the corn up too luxuriantly or parch it, and so hurt the harvest; as the soil is sufficiently fertile of itself. Of equal goodness is the ground in great part of Siberia: for example, on the Samara; on the Ufa in the country of the Bashkirs; here and there in the

* Pallas, vol. ii. p. 650 & seq.

† Ibid. vol. iii. p. 6.

Baraba, or the barabinian ſteppe; alſo on the Kama, whence a great quantity of corn is ſent to the northern cornleſs dwelling-places on the Dvina and Petſhora. In like manner too in the government of Iſetſk the ſoil generally conſiſts of a black earth to the depth of an ell, conſequently is proper for tillage, for meadow-land, and garden-ground. On the Oby near Barnaul, the black earth does not indeed go very deep, but the marly clay * that lies under it, fertilizes it ſo much as to make it, in ſome places, yield plentiful harveſts, without manuring, for twenty years ſucceſſively †. At Kraſnoyarſk, the fields will bear no manure whatever, and yet continue fruitful for 10 or 15 years, if only ſuffered to lie fallow every third year ‡. When the fertility ceaſes, the boor takes a freſh piece from the ſteppe. On the Selenga, in the diſtrict of Selenghinſk, the fields are hilly, and yet will bear no manure, as it is found on repeated trial to ſpoil the corn §.

* A dark-grey earth, about a foot deep, beneath which runs a layer of clay, and is held in many places to be fine arable land.

† Pallas, vol. ii. p. 641. ‡ Ibid. vol. iii. p. 6.

§ Ibid. p. 168.

Meadows.

Theſe are in an abundance not to be deſcribed; though here and there a diſtrict may be in want of them: but regularly eſtabliſhed farms, on account of the long winters, require a great ſupply of hay. At the ſame time there are large tracts of country, where the meadows (which in many places are called hay-crops, and when they are overflowed by ſome river every ſpring, luchten) are not uſed as ſuch at all, either becauſe the people want no hay, or becauſe from lazineſs they do not cut it, but oblige their cattle throughout the winter to ſeek a poor nouriſhment on the paſture-grounds, and ſometimes even under the ſnow.

Hence it follows, that artificial meads, as not deemed neceſſary, are unuſual. Where a want of them is ſeen, there is commonly a deficiency in land fit for that purpoſe *, or the people chooſe rather to turn it into arable. However, ſome ſteppes produce the beſt meadow-graſs for provender, and yield ſeed for making artificial meadows; ſuch as the eſparcette, the alpine hedyſarium, clover, various kinds of artemiſia, pulſe, ſtarflower plants †, and fine graſſes that will bear any climate.

* Sometimes alſo a want of people or of time, but moſt frequently lazineſs, is the reaſon that the increaſe of meadows is neglected.

† Pallas, vol. ii. p. 75.

All

All the meadows may be reduced to these four kinds: 1. Fine productive meads that have a good black, but somewhat moist soil: these yield the greatest crops of hay; to them belong the luchten. 2. Dry, whereof the soil is fit for agriculture, and at times is so employed; they commonly yield a short but very nutritious hay. 3. Watery and marshy; these do not produce the best, but give a very serviceable hay in cases of scarcity in parching summers and dry places. 4. Fat steppes, where the grass in some parts grows to the height of a man: they are seldom mown.

Numbers of watery-meadows might be much improved by draining, and where the moss impedes the growth of grass, by cultivation; but these works are rarely undertaken; only sometimes a careful landlord enlarges his meadows by clearing the brushwood, or by adding a fresh piece to them from the forest; but it is generally thought unnecessary, or at least very difficult, to make them level *; and therefore many meadow-lands have more the appearance of a desert. — In districts where the grass is bad, rank, and acrid, the horses and cows are gradually accus-

* To remove the inequalities arising from moles, moss, &c. is difficult, but very advantageous. — The collected hillocs make excellent manure.

tomed

tomed to it, and eat it from hunger, without being followed by any perceptible injury or ſickneſs.

3. *Foreſts.*

Some regions ſuffer a great ſcarcity of wood; and conſequently, if not all, yet a part of them are uninhabited: whereas others have ſuch a ſuperfluity of prodigious foreſts, that no uſe can be made of them. In Great Ruſſia, which, however, is much more thickly peopled than the remoter regions, theſe are ſeen: as a proof we need only mention the great and almoſt unuſed foreſts between Peterſburg and Moſco; as alſo thoſe between Vladimir and Arſamas, which appear even frightful to many travellers. In Siberia are ſome even larger; for example, about the Ural mountains; in the diſtrict of the river Tara; on the Ufa as far as the Kama; and the mountainous and uninhabited tract of the foreſt Aterſkoy, between what lately were the provinces of Perme and Ufa, is 75 verſts over *. Where there are no iron-works, no towns nor rivers in the neighbourhood, theſe fine foreſts can neither be uſed nor their products be turned into money. The largeſt trees fall down with age, or are

* See Pallas, vol. iii. p. 466. 470. and 472.

broke

broke by ſtorms, lie rotting upon the ground, hinder the young ſhoots in their growth, and give the foreſts a diſmal appearance. They often cut down large quantities without making any uſe of them. So, lately, on account of the highway robbers, who are apt to infeſt the foreſts, great cuts have been made on both ſides of the ways, which give a freer proſpect, and allow the air and the ſun to act with greater effect in drying the road.

There is a great diverſity of trees in the ruſſian empire, ſome of which ſhall be mentioned more particularly hereafter. The large oak foreſts in the government of Kazan are ſpared and managed with care, as the crown is ſupplied with ſhip-timber from them. The oak-foreſts in Livonia and Eſthonia are but ſmall; in Siberia they are not found to grow.

On the ſubject of foreſts a few further remarks are ſtill to be made. The empreſs began to think ſeriouſly of their proper management, which formerly extended only to particular provinces: but was now to reach over the whole empire. By a decree of the 26th of March 1786, it is ordered that the foreſts belonging to the crown ſhall be deſcribed, ſurveyed, ſurrounded with a ditch, and regularly ſet off into portions for felling,

felling *. The ſenate therefore iſſued its commands on the 18th of December 1791, to the general governors and their lieutenants, for this purpoſe. — However, it muſt be confeſſed that the proper culture of timber, in many, or even in moſt parts of the empire, is ſtill to be reckoned among the unuſual matters of office; and that too even where a ſenſible ſcarcity calls aloud for the utmoſt care. A due partition of the falls is but rarely attended to by a private proprietor: the whole of his care commonly goes no farther than to the ſparing of an adjacent copſe that ſerves for an ornament to his manſion, or is favourable to the pleaſures of the chace, or affords a ſhelter in caſe of neceſſity. From ſimilar cauſes ſeveral foreſts about St. Peterſburg are kept up with the greateſt attention. — The negligence that has hitherto prevailed in theſe reſpects has already long ago in ſome diſtricts put a total ſtop to their mine-works, for want of the neceſſary fire-wood. — At the ſame time it is not to be wiſhed that this œconomy in the

* As to ſuch as are private property every proprietor is left to his own diſcretion; it being one of the inherent rights of the nation, that every landholder ſhall have the free adminiſtration of his own poſſeſſions: and the government has never yet taken any ſtep towards the limitation of the ſubject's voluntary management of his foreſts and lands.

article

article of trees ſhould be carried to extremity, without having a due reſpect for the conſtitution of the provinces and the claims of the boors. Theſe, as vaſſals can poſſeſs no immovable property: all the wood they want they fetch gratis from the foreſts of their lord; which, from antient cuſtom, they treat as their own property. They may be compelled, however the late regulation may ſeem to be againſt it, to confine themſelves to the fall of wood allotted for the time; only neither a kameralhof, nor the hereditary lord, or his rangers, muſt pretend to aſcertain how much each boor ſhall annually take away from the fall; as his wants cannot be preciſely calculated, nor are they every year equally great. He will never fetch away more than he has occaſion for at home, unleſs he finds a convenient opportunity for carrying on a petty trade in the article of firing. Even this ought not to be too ſcrupulouſly forbid for two reaſons: firſt, becauſe, without this, many towns would be entirely deſtitute of fuel; ſecondly, becauſe the boor would thus be deprived of the means of ſupport on a failure of the harveſt, or in any other misfortune. There are places where the inhabitants moſtly gain their livelihood from the foreſts; as at Kargapol, for example. Conſequently, the management of woods, as practiſed in

in England and other foreign parts, could not be altogether introduced into Ruſſia. — The propoſal to remove all difficulties by allotting to every cottage its peculiar portion of foreſt, could not be every where executed; and it might likewiſe give room to apprehend leſt the then poſſeſſor, by negligence or by too prodigal a ſale of his ſhare, might ſoon let it go to ruin, if competent overſeers were not appointed; who, as is felt by frequent experience in Livonia, are either thieves themſelves, or for a trifle of money will wink at the depredations of others.

4. *Mountains.*

Several governments are very flat, and almoſt one plain throughout; whereas in others are ſeen not only lofty mountains ſtanding inſulated and alone, but alſo large chains or ridges of mountains. Among others thoſe of Finland, Taurida, Kamtſhatka, &c. But the moſt noted, and in many reſpects the moſt beneficial, is that of the lofty Ural. It may be divided into three parts; the kirghiſian, the part abounding with ore, and the deſert, which reaches as far as the frozen ocean, and is ſtill for the moſt part uninhabited and unexplored. This monſtrous ridge is uſually held to be the line between Europe and Aſia, in ſuch manner that one ſide belongs to

each of these quarters of the world. Pallas thinks * that the arm of it which bears the name of Obshisirt, and traverses the country between the river Ural and the Samara, may be admitted as the border as far as the Caspian. — The chalk-hills on the Don compose a large chain, with those on the Busuluk †. One principal chain is that which forms the natural boundary between the russian empire and that part of Soongoria which now belongs to China; called, from the Irtish to the Oby, the Altaian; from the Oby to the Yenissey, the sayane mountains, and runs between the Amoor and the Lena, even to the eastern ocean ‡. Generally speaking, all Daouria and the regions lying beyond the Baikal, are mountainous, and many of its particular hills are of considerable height. — Moreover, arms of Caucasus and the carpathian mountains extend into the european part of the empire.

In general, it is to be remarked, that some are covered with eternal snow and ice, while others are clothed with forests and a beautiful herbage. From the siberian mountains great advantages accrue to the nation on account of the excellent metals with which they abound. Others contain

* Travels, vol. ii. p. 312 † Ibid. vol. iii. p. 682. 684.

‡ Ibid. vol. ii. p. 510.

salt-

ſalt-ſprings, (and even whole mountains of ſalt,) or ſulphureous and otherwiſe excellent wells; beſides a variety of other valuable products. But there are alſo large ſand-hills, which ſeem to ſtand there for no uſe whatever, and to have ariſen merely from the caſual effects of inundations: they bear, however, ſometimes a ſort of graſs and herbs. Such are found in the ſandy deſert Naryn and on the river Achtuba, likewiſe about the Don, and the Ilovla that falls into it *. — On the peninſula of Kamtſhatka and on ſome of the iſlands in the eaſtern ocean are burning mountains. — The lofty mountains, from the quantity of melted ſnow, during the ſummer, frequently cauſe inundations.

5. *Steppes.*

This term does not properly denote low and watery places, or moraſſes, but dry, elevated, extenſive, and for the moſt part uninhabited plains. Some of them being deſtitute of wood and water, are therefore uninhabitable; others have ſhrubs growing on them, and are watered by ſtreams, at leaſt have ſprings or wells, though they are void of inhabitants; yet in theſe nomadic people wander about with their herds and flocks, and thus make them, if not their conſtant, yet their

* See Pallas, vol. iii. p. 540. 548. 683.

ſummer reſidence. In many of them are ſeen villages. — Some occupy a very large ſpace: thus, it is calculated that the ſteppe between Samara and the town of Uralſk * amounts in length to upwards of 700 verſts; but, as every twenty or thirty verſts we come to a lake or river, the Ural-kozaks traverſe them when they fetch their meal from Samara. — Probably hereafter ſeveral of theſe ſteppes, at leaſt in ſome places, will be cultivated, if they wiſh to raiſe foreſts upon them.

In regard to the ſoil an extreme variety prevails, either being very fruitful and proper for agriculture or for meadow-land, or indiſcriminately for both. Accordingly in the ſteppe about the Don, the kozaks of thoſe parts employ themſelves in agriculture, as well as in the breeding of cattle. Some of them furniſh excellent paſture by their fine herbage, as the ſouthern tract of the iſetſkoi province, and the ſteppe of the middle horde of the Kirghiſtzi †. Or the ſoil is unfruitful: whether it be the ſand, the ſalt, or the ſtone it contains that is the cauſe of it. Among theſe are to be reckoned the ſandy ſteppe on the Irtiſh near Omſk; in general we find about the mountains up the Irtiſh pure arid

* Formerly Yaik. † Pallas, vol. ii. p. 75.

ſteppes,

ſteppes, and therefore no villages. Alſo the Kraſno-ufimſkoi, between the rivers Belaia, Kama, and Tchuſſovaia, towards the Ural-chain, is moſtly ſandy; and that on the Argoun towards the borders of China, is of a ſtill worſe ſoil, conſiſting of rocky particles and flint. The whole of the ſteppe along the river Kuſhum, towards the town of Uralſk, is deſcribed by prof. Pallas* as dry, poor, ſaline, and unfit for any kind of agriculture, for the breed of cattle, and even for permanent inhabitants; there is not even a ſolitary ſhrub to be ſeen, much leſs any wood. In general ſaline ſpots are not unfrequent in the ſteppes; and here and there we alſo meet with ſalt-lakes: however, ſuch diſtricts may invite to camel-paſture.

Moſt of the ſteppes are of a changing ſoil. So Pallas calls the extenſive Baraba, from the Irtiſh to the Oby, a beautiful country bleſſed with game and fiſh; for though one part of it is ſaline, yet it contains a great many lakes as well as large tracts very well adapted to agriculture. So likewiſe is the vaſt ſteppe of Kuman in many places ſandy, dry, and deſtitute of water; yet its flats which border on the river Kuma ſeem formerly to have been well peopled, and at preſent very favourable to that end.

* Travels, vol. iii. p. 525.

The ſteppes are frequently fired, either by the negligence of travellers, or on purpoſe by the herdſmen, in order to forward the crops of graſs; or, it may be, out of malice, as ſome years ſince the kozaks of the Yaik did; when, having riſen in rebellion, a ſmall corps of ruſſian troops advancing againſt them, they ſaw themſelves all at once almoſt entirely ſurrounded by the high graſs on fire. Such a cataſtrophe often occaſions great miſchief; the flames ſpread themſelves far and wide, put the dwellings of the inhabitants in imminent danger, conſume the corn on the ground, and even ſeize on the foreſts. Many prohibitions under ſevere penalties have accordingly been iſſued againſt this practice, but they ſeldom have any effect *. All the ſteppes may be conſidered as a ſort of common land.

Moraſſes.

Of theſe alſo are great plenty, and of very various magnitudes. Thus the northern verge of Siberia towards the ſhores of the frozen ocean, for ſeveral hundred verſts in width, is one prodigious watery moraſs, grown over with moſs, and entirely deſtitute of wood, and which in ſummer is only thawed to the depth of about a ſpan †. In the interior of the empire we meet

* See Pallas, vol. ii. p. 378. † Ibid. vol. iii. p. 23.

with

with ſmaller; and many of the foreſts have a ſwampy bottom: among others may be noticed the tract between the rivers Kama and Viætka, which is very woody and boggy.

They may be reduced under the following four general kinds: 1. Simply low watery land; ſuch is capable of being improved, by letting off the water in the common methods, or by removing the trees that ſhade the ground, and prevent the wind and the ſun from acting upon it; it then may become good meadow and arable land. 2. Swamps, which, when they have but ſome drain for the water, bear at leaſt ſhrubs; they yield turf formed out of the moſs, and even at times produce a little hay. 3. Bottomleſs moraſſes, which appear to be lakes grown over. They frequently will bear neither man nor beaſt. Only when they gradually thicken their upper ſhell by vegetation, ſome graſs may be cut upon them. They admit of no farther improvement than what Nature herſelf effects by degrees. Sometimes they have a few miſerable low buſhes upon them, but generally none at all. 4. Moſs-moraſſes, the deep and uſeleſs moſs of which will permit neither graſs nor a ſhrub to grow, or at moſt only a few low wretched ſticks of fir, &c. which preſently wither and die. They are abſolutely unprofitable; at leaſt they are held to be ſo.

Thus we ſee that ſome moraſſes are not without their utility, either by yielding a little hay in dry ſeaſons, or as containing turf, which in parts that produce no wood may be advantageouſly employed. Yet even the worſt moraſſes cannot be pronounced deſtitute of all utility: at leaſt in wet, rainy years they draw off a great quantity of water into them, and thereby prevent inundations, even ſuch as would ariſe from the melting ſnows, and laſt a long time; they therefore help to dry more ſpeedily the higher lands that have been overflowed.

Waſtes.

Tracts which, by reaſon of their rocky or at leaſt flinty ſoil, admit of no cultivation; or on account of their deep quickſands, which will ſcarcely ſuffer a poor blade of graſs to ſhoot up; or on account of their moſs, or their eternal ice, are totally unfruitful, ſeem to require no particular claſs, as they may aptly enough be referred to that of the wild ſteppes or the horrid moraſſes. Yet travellers ſometimes ſpeak of ſand-waſtes. One of this ſort, open, bare of ſhrubs or buſhes, is ſeen near Sheleſenſka *; alſo on the Irtiſh and in the Baraba are ſandy and ſaline waſtes, which never can be turned to any purpoſes of agricul-

* Pallas, vol. ii. p. 462.

ture.

ture*. Still larger is the ſand-waſte Anketeri, between the rivers Kuma and Terek †. But the largeſt of all, named Naryn, commences between the river Uſen and the ſalt-lake Elton, and ſtretches quite to the Caſpian-ſea; yet, on the plains between the ſand-hills, are good fields, and might here and there be inhabited ‡.

Paſture-grounds.

Neither do theſe properly need to be particularized; for though there are large tracts of land, ſerving merely as paſture, yet in general fields, meads, foreſts, ſteppes, moraſſes, and even waſtes, are uſed as ſuch. The empire contains them in an innumerable abundance; many, from their fine graſſes and fodder, are of uncommon goodneſs. Hence it is, that in ſo many parts we have ſuch excellent cattle; and the paſture-grounds, which are, ſtrictly ſpeaking, commons, invite as it were to the nurture of cattle. The whole Ukraine, the country near Archangel, and ſome of the ſteppes, are famous for their excellent paſtures, and conſequently for their fine cattle.

* Pallas, vol. iii. p. 274.

† Id. ibid. p. 541 and 590.

‡ Id. ibid. p. 532, & ſeq.

By a late ordinance, on each ſide of the high-roads all over the empire a broad ſpace is left, which may not be granted to any perſon as property, nor be ploughed nor mown, but remain free that travellers may always find paſture for their horſes, as well as drovers for their cattle, along the roads to the various towns.

Salt-places.

Theſe are not uſually introduced under the head of land and ſoil of a country; but in treating of Ruſſia it is neceſſary, from the inexhauſtible quantity of its ſalt-places, which are of exceeding great importance to the ſtate, to its inhabitants, and to the revenue. Eſpecially in Siberia an amazing quantity of ſalt is produced.

Salt is a monopoly of the crown; which ſupplies the empire with it at an extremely moderate price *. However, ſome provinces are excepted, who either fetch their ſalt themſelves entirely free of expence from the lakes; for example, the Ural-kozaks; or buy it of foreigners, as the provinces of the Baltic; and then the crown

* Therefore a guard is conſtantly kept at the ſalt-places, to prevent perſons from fetching ſalt from them contrary to law.

takes

takes only the lake-tax. Mr. Pallas complains, in his travels, that from the preparing it at the ſalt-lakes, from the method of tranſport, and from general negligence, it is delivered uncommonly foul; and therefore he recommends the rock-ſalt, which is eaſily clarified. Omitting the ſea-ſalt*, we may reduce the ſalt-places under the following claſſes:

I. Rock-ſalt from the ſalt-mountains. To this claſs belong, among others: 1. The Iletzk in the region of Orenburg, which is well-known from the writings of ſeveral authors. 2. That in the mountain-ridge Arſargal-Shoogot in the ſteppe towards the Volga; it has not hitherto been ſufficiently brought into uſe, but is exceedingly pure and clear†. 3. The ſalt-hills about 150 verſts from Tchernoyar. Probably alſo the region of mount Bogdo contains the ſame ſort of ſalt‡.

II. Salt-lakes, the multitude of which, eſpecially in Siberia, is not to be deſcribed; where

* Georgi, in his paper for the prize at the academy, has expreſsly mentioned the ſea-ſalt near Archangel, which he might juſtly do, as ſome ſalt is actually obtained there from ſea-water. And there is no reaſon why the ſame methods might not be practiſed elſewhere if neceſſary.

† And therefore Mr. Pallas recommends it; travels, vol. iii. p. 543, & ſeq.

‡ As Mr. Pallas ſuppoſes, id. ibid. p. 675.

the

the ſalt, without boiling or any other preparation, forms itſelf, and ſhoots into thick ſcales. Of this kind are: 1. That in the Kuman-ſteppe, whence the Don-kozaks fetch ſalt in great quantities *. 2. The lake Elton. The ſalt that forms itſelf in this is inexhauſtible. 3. Bogdinſkoi or Bogdom Dabaſſu, another inexhauſtible ſalt-lake, in the ſteppe towards Tzaritzin. Its ſalt is better than that of the Elton †. 4. Inderſkoi, or the ſalt-lake Inder, in the country of the Ural-kozaks: it is not leſs than 26 verſts in circumference, and yields excellent ſalt. 5. Ebelai, in the country of Kirghis-kozaks, and particularly in the region where the river Tobol takes its riſe. 6. Borſinſkoi in Daouria, whence alſo ſometimes Nertſhinſk and other places are ſupplied. 7. The ſalt-lakes of Uſen, whence the Ural-kozaks take their ſalt. 8. The Gurieffkoi, ſome of which, and particularly two, are much eſteemed. They lie in the Kirghis-ſteppe. For a long time the produce of them was brought under an eſcort to Gurief, where every inhabitant received it gratis from the magazine. 9. The Koriakoffkoi ſalt-lake, in the ſteppe 22 verſts from the Irtiſh; the ſalt

* Pallas's travels, vol. iii. p. 587, & ſeq.

† Id. ibid. p. 672, & ſeq.

of which, amounting annually to 450,000 pood, is brought in flat-bottomed boats to Tobolſk*. — To ſpecify particularly other ſalt-lakes would be ſuperfluous; but they are in great numbers in Taurida and elſewhere.

III. Salt-ſprings. There are of theſe which flow with ſalt in its proper ſtate, for inſtance in the government of Irkutſk; but their number is very inconſiderable; and therefore it will only be neceſſary to notice thoſe where works either are or might be raiſed. Of this ſort, where ſalt is actually prepared, we find in the government of Perme at three places, viz. 1. In the town of Solikamſk. 2. In the village Uſſoliye. 3. In the hamlet Chuſſofſkoi-gorodok. Some belong to the crown, and others to private owners, who deliver their ſalt to the crown at a price agreed on. — But there are alſo of the ſame kind in other parts; as at Staraia-Ruſſa. Buſching is miſtaken in ſaying that the works there are all gone to ruin. General Bauer has very much improved them, and his improvements have been in part introduced in Permia. — The diſtrict of Irkutſk uſes annually from 60 to 70,000 pood of ſalt; and that quantity is prepared there. — Sometimes the pood of ſalt coſts the crown on the ſpot only 4½ kopecks;

* Pallas, vol. ii. p. 473.

but

but with the freight in Kungour 12, though in Niſhnei-Novgorod no more than about 10 kopecks.

IV. Salt-ſtreams. Salt or ſaline ſtreams are numerous, beſides thoſe which Mr. Pallas has mentioned by name *. Speaking of the ſtream Solenka, which falls into the Achtuba, he is of opinion that its kitchen-ſalt would increaſe by damping it in the heat of the ſun.

V. Salt-grounds, which are dry, are found in abundance; as on the weſtern margin of the ſand-waſte Naryn, and in the Kuman-ſteppe; likewiſe in the ſteppe between the town Uralſk and Aſtrakhan; ſome are ſo ſalt, that many bare places appear entirely white with it. — The Tavri-nor is a dry flat ſalt-ground in Daouria, extending in length, towards Mongolia, 30 verſts, and in its greateſt breadth above 20: it may be conſidered as a great emptied lake. The ſteppes of Iſet, Iſchim, and the Baraba, as alſo the region beyond the Baikal, are rich in natrous glauber-ſalt; bitter-ſalt-grounds are likewiſe ſeen about the rivers Selenga, Chilok, Chikoi, Onon, and Argoun. So the ſteppe about the ſtream Kuſhum, towards Uralſk, contains many ſaline places †.

* Travels, vol. iii. p. 585. † Id. ibid. paſſim.

Mines.

Mines.

Theſe ſtill leſs than the ſalt-places ſeem to belong to the preſent ſection: but, on account of their great number and productiveneſs, they require notice under a peculiar head; and I could find no fitter place than this to introduce it.

Almoſt all the mine-works of the empire are of the preſent century; being firſt ſet forward by Peter the great. But, though ſome pretend that the attempts made by tzar Alexey Michailovitſh in 1676 were of no effect, yet this requires ſome rectification. The academical kalendar of St. Peterſburg for the year 1790 mentions that the firſt diſcovery of copper and iron ore was made 162 years ago, and that then the firſt iron was made into bars. This then implies no ineffectual attempt: there were already in the laſt century, in the parts about Moſco, iron-works, which brought their proprietors conſiderable profit *. However, at that time, all metals, even iron, were ſcarce in Ruſſia; and there were noblemen who could not ſhew an iron nail in their houſes. Indeed there are ſtill but few mines in Great-Ruſ-

* A german merchant of Moſco, named Miller, was one of theſe; and the family of Demidof had then begun to work their mines.

ſia;

ſia *; but ſo much the more numerous are they in Siberia: when once theſe were diſcovered and opened, the ruſſian empire had plenty of metals of all kinds. They may be pronounced inexhauſtible, in the ſtricteſt ſenſe of the word: they yield, according to their different deſcriptions, gold, ſilver, copper, iron, lead, ſemi-metals, ſtone, &c. That native gold, ſilver, and copper are alſo found, we have ſufficient teſtimony from profeſſor Pallas †. The works erected at them are in great multitudes; and yet they might be very much increaſed, as vaſt quantities of ore lie ſtill untouched for want of hands, and here and there for want of foreſts. The greater part of thoſe now working are in the ſpacious mineral mountain-ridge of Ural; which is covered with great foreſts, though they are already in many places entirely conſumed in the works ‡. From all an incredible quantity of copper and iron is produced; they were moſtly not undertaken till towards the middle of the preſent

* Indications of metals are found in many parts, even in Livonia and in Finland, or the preſent government of Viborg; but are not worked on account of their little conſiſtence.

† Travels, vol. ii. p. 60, & ſeq.

‡ Some are of opinion that no woods can grow on mineral-mountains.

century.

century. They are so very numerous that some of them are presently abandoned on the supposition that they are poor, or that richer may be found in the vicinity *. The Bashkirs of these parts are diligent searchers for mines, and readily impart their discoveries, when encouraged to it by little rewards. — Among the mineral-mountains the Schlangenberg is remarkably productive in gold and silver; the Tschudes explored it several ages ago. It forms a part of the Altaian-chain, but stands distinct from it, about 95 versts northward from the Irtish. In the mountains of the Yeniffey traces of the noble metals are every where discovered: they may probably therefore some time hence come into great employ.

The emperor Peter I. was very solicitous to make the most advantage of such a source of employment and wealth as the russian mines presented, and therefore made it his study to encourage his subjects to work them. Accordingly, about the year 1719, he issued a grant in favour

* Several have been given up without sufficient reason, on false information: an instance whereof is given by Pallas, in his travels, vol. iii. p. 381. Sometimes a mine is abandoned till the wood is grown up again. They do not take the trouble to separate the silver and gold from the copper, because they can have it at a cheaper rate. This accounts for the copper coin of Siberia having a mixture of gold in it.

of

of miners; wherein, among other things, he ordains, that the works ſhall be erected at the coſt of the crown, and that then they ſhall be ſettled in perpetuity on the individual; but from whom the reimburſement of the firſt expence ſhall be demanded by inſtalments proportionate to the produce. At the ſame time he regulates the imperialty, and orders that every mine-work ſhall have a ſtated number of crown-boors appropriated to it, yet only ſo far as that they may earn their head-money; that is, that they may work it out; but the maſters of the works pay this tax into the coffers of the crown. Afterwards, however, he had not time, or forgot to fix preciſely by what rule this labour ſhould be appreciated; when it was to be demanded, &c. — In the archives of the college of mines, now aboliſhed, is a writing ſigned by the emperor's own hand, with the ſignatures of a commiſſion conſiſting of eight perſons: whence it appears, that in the year 1722 he intended to farm out all the mine-works belonging to the crown to the french Miſſiſſippi-company; but this matter was never brought to effect. — The empreſs Anna began by conducting the mines in the ſaxon manner; as the principal director at that time was a native of Saxony; and iſſued other regulations concerning the crown-boors working for their head-

head-money. — The empreſs Elizabeth followed the advice of ſome perſons, who were not favourable to the Germans; and therefore whatever theſe had introduced was now rejected. She made grants of mines to ſeveral rich ruſſian families, with great numbers of crown-boors, whom every mine-owner taſked with as much labour as he pleaſed for their trifling head-money: which cauſed many inſurrections among them. — When Catherine II. mounted the throne, ſhe made it her firſt endeavour to remedy the preſent grievances, and to prevent them for the future; but in this ſhe proceeded with the greateſt precaution. Accordingly, in 1766 ſhe inſtituted a particular commiſſion, to examine into the whole ſtate of the buſineſs, and to lay before her the reſult of their inquiries. Count Peter Panin preſided at this board, and had ſeveral reſpectable men to aſſiſt him. From the extent of the affairs they had to inſpect, and the intervention of ſeveral accidents, the progreſs they made was ſlow; in the mean time matters became daily more preſſing, and the empreſs demanded a ſpeedy termination, as the boors, who had been made to hope for ſome relief, were kept in anxious expectation by the delay. At length the commiſſioners brought the affair to a concluſion. It was not poſſible entirely to

free the crown-boors from the labour of the mines, as their obligation to it was founded on law; namely, the patent and regulation relating to mines abovementioned; and, moreover, as without these labours several mine-undertakings must have totally gone to ruin. But the empress found out an expedient, by precisely defining those tasks, whereby the works might be kept up, and the boors completely satisfied. In what manner this was done will presently be shewn.

We have seen that the mines belong, some to the crown, and others to private-owners. What the former produce, will more properly be introduced in the section of the revenues of the empire. It is here only necessary just to mention that to the crown principally belong the following: 1. Several iron-works in various places. 2. Several copper-mines, likewise in various places, particularly in the government of Perme. 3. The gold-works or gold-washes at Ekaterinenburg. 4. Some silver-works, of great consequence; as at Nertshinsk, which sometimes go under the name of the Argoun-works, as they are called by Busching: but on the Argoun are at present no erections, as it was found necessary to remove them to Nertshinsk. But those of Kolyvan are the greatest and most productive,

also

alſo denominated from Barnaul or Kolyvanovoſkreſenſkoi; and the beforementioned richly-yielding Schlangenberg, from which the ore is carried to the works at Barnaul or Kolyvan, is of this number. Of the ſilver it is to be remarked, that gold is alſo ſeparated from it; which is ſent only to Peterſburg, as the place to which the blick-ſilver goes from the works. The gold and ſilver are looked upon as pure gain, as all the neceſſary expences are repaid by the copper at the ſame time obtained. All I am able to learn concerning the quantity of gold produced at Barnaul and the Schlangenberg is, that, from 1745 to 1780 it amounted to 686 pood, 16 pound, 49 ſolotniks of pure gold.

The mine-undertakings of private individuals met with every needful encouragement from the crown. Whoever diſcovered a mine and was inclined to work it, was allowed to make the proper diſpoſitions in erections, digging, &c. for which he was granted ten years free; the adventurer was put in poſſeſſion of the property of the ground as a freehold, provided it belonged to the crown *, with convenient places on the banks of ſtreams and rivers for the works and neceſſary buildings, and a conſiderable extent of foreſt;

* Many afterwards obtained a mine by purchaſe, &c.

and when he had no boors of his own that he could ſet to work, he received a certain number out of thoſe raiſed for recruits; who were always to remain with the works, and to multiply themſelves there; if theſe proved inſufficient, other boors were given him, to perform the occaſional labours in lieu of their head-money. Only, in all private undertakings of this ſort, the crown retained certain imperialia, ſuch as: 1. All the ſilver found to be delivered to government for a ſtated compenſation. 2. A yearly tax on every furnace; for the principal one in iron-works 100 rubles; for every copper ſmelting-furnace 5 rubles. 3. Of copper and crude iron one tenth. 4. The half of all copper, for coinage; for which the proprietor received $5\frac{1}{2}$ rubles per pood. 5. All ſorts of veſſels for the artillery and the admiralty for a ſtated price, ſettled in 1715 and 1728. 6. The tithe of the capital of the minerals or ores.

In all this the late empreſs, to the exceeding great benefit of the proprietors, and to the encouragement of her ſubjects, made many alterations; by ſeveral edicts or ukaſes having relinquiſhed the imperialia, and aboliſhed the taxes. The delivery for the admiralty and the artillery was given up in 1770; and, as an act of grace on occaſion of the peace of 1775, the tenth of

the capital of the minerals, as well as the tax on the furnaces, with the tenth of the copper and raw iron, were remitted. As to the delivery of one moiety of the copper at a ſtated price for coinage, a ſhort account will be given of it under the article of revenue. Laſtly, the empreſs, by an ukaſe of the 28th of June 1782, entirely aboliſhed the requiſition of the ſilver; and permitted the private proprietors to explore gold and ſilver for themſelves; only the ground muſt entirely belong to the undertaker, or be voluntarily made over to him, and the work muſt only be performed by his own or hired free people: for neither crown-boors nor crown-foreſts are any longer to be granted *. In virtue of this ukaſe the mine-owner is at liberty to ſell at pleaſure whatever gold and ſilver and precious ſtones he finds: only with this reſervation, that he pay the tenth of the two former into the coffers of the empreſs. This however was ſomewhat altered in favour of the nobility by ukaſe in 1785, who are thereby allowed to open mines on their own eſtates, and to diſpoſe of the ſilver and gold they find, at pleaſure, without any tribute to the crown.

Thus, by the aforementioned ukaſes and act of grace, important advantages are accorded to

* Indeed the crown has no longer ſuch abundance of either as to be able to do it.

the owners of mines and firſt adventurers, and the royalties uſually required in other kingdoms and empires, are ſacrificed to the benefit of the ſubject and the augmentation of the national wealth. Notwithſtanding which, we have not heard, that ſince that time, at leaſt not ſince the interval between 1782 and 1786, any new works have been erected, though there are ſtill mines enough to be diſcovered. But many who would adventure are in want of people; the foreſts begin here and there to decline; and ſuch undertakings require great capitals. Neither have there been, ſince thoſe ukaſes, any gold and ſilver mines opened by private individuals: there is indeed one owned by a perſon in the mineral mountains of Nertſhinſk; but he had the grant of it before that period.

The crown has occaſionally, not merely granted one of its mine-works, according to the original inſtitution, but regularly ſold it to a private perſon. Thus, one of three iron-works, and that a very productive one, was purchaſed, with all the people belonging to it, pits and erections, together with a conſiderable foreſt, for 200,000 rubles, as we are informed by profeſſor Pallas; who alſo mentions another in ſimilar circumſtances. The crown has alſo bought ſome of them back again. — Inſtances are not wanting

of

of private perſons who have unlawfully appropriated to themſelves mines belonging to the crown.

In caſes where the proprietor does not reſide on the ſpot, he appoints an overſeer, who is rarely a perſon of condition, ſuch as a diſbanded officer, &c. but uſually a vaſſal from among the boors, who can read and write, and is called a prikaſchik. Such an one at times has the management of an eſtate or comtoir, turning half a million of rubles annually, provides for the whole concern, and makes his employer rich. In other countries ſome dozens of perſons would be placed in ſuch a truſt, as checks on one another.

In regard to the workmen it has already been obſerved, that at firſt it was the practice to aſſign a certain number of crown-boors to private adventurers, (many of whom, being ſimply merchants, had no vaſſals, and could procure no voluntary workmen,) who were to work out their head-money in that capacity. But from this method oppreſſions aroſe: the people were allowed no reſpite from labour, with hardly any recompence, and no conſideration had to the length of way they muſt travel to the works, &c. During the reign of the empreſs Elizabeth they therefore roſe in many villages; ſo that it was

neceſſary to ſend regiments of ſoldiers againſt them, which occaſioned lamentable ſcenes, but which are not to our preſent purpoſe. The late empreſs put a ſtop to all theſe horrors, by aſcertaining when and how much the boors ſhould work for their head-money. Since that time they can only be ſet on when they have no labours of huſbandry to do; ſo that in ſummer they ſometimes want hands at the mines. For their head-money, of 170 kopecks each ſoul, they work at the rate of every day in ſummer, with a horſe, 20 kopecks; without a horſe 10; but in the winter they are paid 12 and 8 kopecks a-day. Some maſters hire men from other parts, even crown-boors, when they have none of their own. To ſuch volunteers they pay at ſome works from 13 to 15 kopecks for every 100 pood of ore. Where the upper ore is eaſy to be got, boys and girls are employed at the rate of 3 kopecks per day: they preſs in crowds to this employment. — The maſter workmen at the crown-mines are obliged to get 100 pood of ore every 12 hours; for which they are paid from 14 to 18 rubles per annum; but a man that ſeparates the ore, 24 rubles. — The ore is uſually roaſted on the ſpot, and then conveyed, ſometimes by voluntary carriers, to the ſmelting-houſes: theſe receive for every pood, when they have 3 verſts to carry it,

a quarter

a quarter of a kopeck; and when the diſtance is 15 verſts, three quarters of a kopeck, carriage-hire. — At the crown-mines of Barnaul, beſides their own people, they employ about 48,000 boors, who earn their head-money there. They have always been well treated, even before the ukaſe of 1782.

The mines of the Schlangenberg, and in general the Barnaul, are in all reſpects of great conſequence. Of the gold and ſilver we ſhall be more particular when we come to ſpeak of the revenue; but copper and iron require ſome notice here. The pood of copper ſtands the proprietor in ſomewhat above 4 or 5 rubles. In trade it is reckoned there at 9 rubles. In Peterſburg it is far dearer. According to Pallas's ſtatement, at ſome pits on the Ural, a hundred weight of good copper-ore yields 24 pounds of copper, and $\frac{1}{4}$ to $1\frac{1}{2}$ lots of fine ſilver; conſequently, from 100 pood of ore nearly 2 pounds of ſilver may be got. Hermann reckons only from 1 to 5 per cent. garcopper.

They have iron-ſtone that yields 59 or 60 per cent; but moſt commonly it is 25 per cent. Hermann ſpeaks even of 70 per cent. — Raw iron at many works coſts the crown not more than 10 or 11 kopecks the pood; but caſt iron from 22 to 25; and of ſorted iron 41 or 42 kopecks

kopecks the pood; however in ſome places it is rather dearer.

The greateſt part is ſhipped outwards, and to that end brought to Peterſburg by water. To private proprietors the pood of iron, with the tranſport to Peterſburg, comes at moſt to from 55 to 60 kopecks; but it fetches there from 70 to 120 kopecks: in the year 1789 it was much dearer.

Mr. Hermann calculates that the Ural mines (comprehending, however, the ſalt-work there) ſince the acceſſion of Catherine II. that is from 1762 to 1787, when he made the eſtimate, have enriched the empire to the value of 184 millions of rubles. — One wiſe meaſure is, that at the ſiberian mine-works they have begun to purſue agriculture.

It is a great advantage to the crown, that from its works at Nertſhinſk upwards of 60,000 poods of lead may be obtained; of which about 30,000 poods are delivered at the Barnaul works for ſmelting the hard ores of that place: and thereby much quickſilver is ſpared*.

Of the principal mountains of Ruſſia.

The mountains of Ruſſia may be divided into eleven diſtinct heads, of which the greater part

* Hupel, verſuch des ſtaatſverfaſſung des Ruſſiſchen reichs darzuſtellen, vol. i. p. 81, & ſeqq.

form

form principal chains of themſelves; while others are only continuations of huge ridges, the major part whereof are in the bordering territories. Theſe diviſions are: 1. The Sieverniyagori, or northern mountains, extending between the Baltic and the White Sea. 2. The Valday mountains. 3. The mountains of Taurida. 4. The Caucaſean mountains. 5. The Ural mountains. 6. The Altay mountains. 7. The Sayane mountains. 8. The Baikal mountains. 9. The Nerchinſkaia mountains. 10. The Okhotſkoy mountains; and 11. The Kamtſhatſkoy mountains.

I. The northern mountains, between the Baltic and the White Sea.

The mountains of Ruſſian Lapland.

Under this head are to be claſſed not only thoſe branches which may be conſidered as continuations of the ſcandinavian range, and enter on the ruſſian territory between the White-ſea and the Onega-lake, but likewiſe all the mountains of the governments of Viborg, Olonetz, and Archangel; eſpecially thoſe in the circle of Kola, or in ruſſian Lapland. They lie almoſt totally beyond the 60th deg. of north lat., and, in length, from weſt to eaſt, take up a ſpace of more than 15 degrees. They are for the moſt part but very little known. The accounts we

are

are in poſſeſſion of are as follow: they proceed from St. Peterſburg, where, about the low country on both ſides the Neva, and towards the gulf of Finland, the ground plainly appears to be a mixture of ſand and ſlime, with numerous, often very large pieces of granite, and to have been overflown and left by the ſea. In this ground, ſome forty years ago, as they were digging a deep canal at Strelna, not far from St. Peterſburg, towards the neighbouring gulf of Finland, under ſeveral alternate ſtrata of ſtiff loam and earth, nay even below a ſtratum of ſtone, the workmen came to an oaken barge, but little altered otherwiſe than by the black colour it had acquired, with ſeveral human ſkeletons, and heaps of ſtraw or ſhilf, perfectly diſtinguiſhable. From Peterſburg, quite to Toſnimſkoi-yam, we have ſandy plains, tending north-eaſtward till about Olonetz; thence, proceeding as far as the lake Kotk *, where they extend about the foot of a ſet of mountains, ariſing from the Finniſh hills, conſiſting of granite and black (probably micaceous argillaceous) ſlate, diverſified with numerous vales and pits, which, continuing ſouth-eaſtwards, part the ſandy level from the juſt mentioned trappſtone mountains, on this ſide. Continuing our courſe from Petroſſk (or Petroſavodſk,

* Kotkozero.

now

now the chief town of the government of Olonetz), and having paſſed the iron-works northwards along the weſtern ſide of the Onega-lake, over the river Shuya which falls into it, and having reached the mountains that abound in iron ore, we meet with one of the principal curioſities of theſe parts, in the martial waters of Uſſona, Muun-ozero, &c. Here are ſeen a vaſt quantity of ſtems, branches, twigs, leaves, and roots of birch-trees, and other exuviæ of vegetables, entirely mineralized by iron, with the diverſe texture of the rotten wood plainly viſible, in which mineralizations the tender white rind, known to be in the higheſt degree incorruptible, is preſerved quite in its natural appearance, the ſoil changed into a rich ferruginous earth, and the graſſy ſod into iron ore. The like tranſmutations are ſeen in all the low ſpots and pits that incline towards the Muun lake, but particularly near the martial waters, and over-againſt the village Buigova. Here lie the iron-ore in a wide-extended valley, foreſted apart with birch-trees, and with gently-riſing hills on both its ſides. In this valley, though not in its deepeſt bottom, iſſue the martial ſprings, which, in 1716, by command of Peter I. were fitted with accommodations for public uſe. The well is ſunk about three arſhines and a half below the ſurface, in a hole in ground conſiſting of

of heaps of roots both of trees and herbs (which are partly mineralized) and intermingled with flakes of ſtone, then an arſhine and a half in a clayey kind of a ſtone, mixed with a great quantity of ſulphur pyrites. In the deep points of the valley there is a layer of vitriolic earth under the forementioned, which is a mixture of iron-earth and ſwampy iron-ore*. It is eaſily got, and is then taken to the vitriol-works there and boiled. The mountain-rock† of the heights riſing from the valley is the kind of ſtone mixed with pyrites beforementioned on the Brunnenſole, mingled with gravel. The weſtern heights incline into the Muun lake, from which the peninſula Deknavolok riſes to an uncommon height, and ſtill exhibits the ſame ſort of ſtone mixed with a ſurpriſing quantity of gravel and ſtriated with the ſame fragments. On the northern or more north-weſtern ſide of the Onega lake, the trapp-ſtone mountains take their riſe from the river Shuya, partly reaching to a conſiderable height,

* A ſpecies of the raſeneiſenſtein, ferrum ochraceum, reſpititium minera ferri ſubaquoſa; bog or ſwampy iron ore; phoſphate of iron.

† Bergart. The various rocks or ſtoney ſubſtances which compoſe what in mining is called *the country*, or that part of a mountain which is immediately traverſed by the veins compoſed of ore and the ſubſtances which ſerve as a gangue or matrix.

partly

partly flat, partly protuberant, and only towards the upper end of the lake gently rising, detached, and for the most part stretching to the White Sea. These trappstone mountains, in some places interspersed with serpentin, are in several directions, says M. Renovantz, visibly (perhaps only apparently) underlaid * by the marble, as at Tievdeva and Pereguba. Near the former of these two villages, which is not far from Onega, the marble rises out of a river swelling to a considerable height, and *unterteuft*, on its greatest elevation, where are found great quantities of white and grey chalk-stone, interspersed with coppery talc†, copper pyrites, and verdigris, about the trappstone mountains towards the Sondall-lake. It is from this mass of marble, as well as from that on the northern part of the Ladoga lake, near Ruskoll and Serdopol, that the blocks are hewn for the imperial erections at St. Petersburg. This marble, lying in flakes, discovers no trace of petrifications, but is in many places plentifully interspersed with particles of friable quartz, which gives it in several parts the quality of emitting sparks upon collision. In the various lakes hereabouts are islands, consisting of the same chalk-stone.

* Unterteuft. † Kupferglas.

The

The trappſtone mountains proceed from Tievdeva, both on the ſhores of the Onega lake towards the north-eaſt, and in another direction towards the north. In the bay formed in this lake, called Pereguba, projects a low peninſula, named Pertnavolok, apparently from under the trapp, which conſiſts of a quartzy marble. The trappſtone mountain in theſe parts is frequently covered at its foot with ſtrata of granite, trapp, marble, and quartz, and containing ferruginous and cuprous ore, in neſts and heaps juſt under the ſod*. The peninſula Uſnavolok on the eaſt ſide of the Onega bay, and inclining into the lake of that name, and is in immediate connection with the circular chain of mountains, contains ſeveral of the like congeries, in which ſome portions of vitreous copper ore, a few of aſbeſtus, and ſtill fewer of mica, are interſperſed. The ſtriæ of theſe ſubſtances, thus ſituated, extend in many ſcarcely to a fathom, and their ſurface, according to the depth, ſtill leſs. Another vein of quartz contains ſpecular iron ore, and green ſchorl. In the middle of the circular chain of mountains, after the mountain has riſen to a very great height toward the north-weſt, and tending farther again toward the north-weſt, lies a moraſs overgrown with firs, pines, and birch-trees, from which riſes a ſmaller, and cloſe

* In Taggehængen neſtern und geſchutten.

by

by that a higher hill. Theſe two hills conſiſt of a grey trapp, ſlightly mingled here and there with coppery pyrites. Between the hills runs a courſe of looſe ſand, in ſome places a fathom and a half in depth, in others leſs, mingled with many large and ſmall pebbles; and under it a heap of from one to two and a half fathoms, as if compoſed of round grains of quartz run together, and is plentifully mingled with motley and braſs-coloured ſmall nodules of copper-pyrites, vitreous copper-ore, cuprous talc ore, green and blue copper-ochre, ſingly likewiſe with aſbeſtus, hardened ſmall nodules of clay, little trapp nodules, and ſome few cryſtal-gypſum or ſelenitical nodules, and through which a waving and inclining cleft extends not more than three inches thick, and filled with ſand and micæ. Theſe trapp-mountains then proceed towards Lumpuſcha on the Onega, and thence, amidſt a variety of rivers, moraſſes, and lakes, on which little granite iſles appear; on all ſides forming a delightful ſcene, ſhaping their courſe northward to Voyets or Voytz, a peninſula, laved on two of its ſides by the lake Vyg and on the third by the river of that name which flows towards the White-ſea, where is ſeen a remarkable gold-mine, long ſince done working. About Lumpuſcha the trapp-mountain is violently ſhattered; huge rocky fragments, ſtruck off from

the projecting parts, lie ſcattered at its foot. The trapp is here much mixed with ſpecular iron ore. Not far off is the Vitzga, a ſtream with numerous falls, flowing out of the ſuperior lakes, and loſing itſelf in the Onega; on one of its ſhores, which is quite ſteep, are lofty ſand-hills. Hence, till about Povenetz, theſe mountains gently decline, covered with ſand and ponderous maſſes of granite, to the Onega. Near Povenetz, the river of that name purſues its noiſy downward courſe, over rocks and projecting walls of granite. — In the Vyg lake alſo ſeveral granite iſlands, among many others, make their appearance, their foſſil-quality conſiſting of feldſpar, quartz, and micaceous earth, to the thickneſs of one's fiſt; the ſame is ſeen in ſome iſlands on the coaſt of the White-ſea towards Soroka. The peninſula Voytz, on the other hand, conſiſts of a country of quartz and curved lamellated talc, or a very quartzy gneiſs, which ſhews itſelf again about a verſt farther to the ſouth, in an iſland where is an abundance of quartz fragments interſperſed with ſpecular iron-ore and copper-pyrites. On the gneiſſy country of the Voytz-hills appears a coarſe ſerpentine of a greyiſh green colour. In this gneiſs runs a vein of quartz interſperſed with blue copper-ore, in which formerly lumps of native gold of ſome marcs in weight appeared. — This

Voytz-

Voytz-hill is ſeparated from the weſtern trapp-mountains by the river Vyg, here forty fathoms broad. Directly in flank of the chain, on the weſtern ſide of the river, is a piece of mountain, ſeveral fathoms in length and breadth, entirely bare of ſoil, which is a true maſs of that quartzy mountain-rock mixed with talc, amidſt other collateral mixtures of the talc, and in conjunction with that mineral ſubcavating the trapp-ſtone, which here contains nodules of ſpecular iron-ore frequently as thick as one's fiſt, and here and there interchanged with ſerpentine.

About ſeven verſts weſtward from the Voytzer hill, in which interval ſeveral trapp-ſtone ridges riſe, whoſe natural foſſil in many places is replete with little cubes of feldſpar, ſome rock projects on the higheſt ſummit of the ſaid mountain, conſiſting of quartz and talc again between the trapp; and we eaſily deſcry in it two parallel veins of quartz, running in a long and ſtrait direction from one to two feet thick, which perhaps are not without hope. — Theſe trapp-mountains proceed yet farther northward, quite to the White-ſea; where, laſtly, the granite projects cloſe on the ſhore of the ſea, farther to the weſt, (eſpecially on the bay of Kandalak, and the iſlands that appear in it,) attains to conſiderable heights, and exhibits a variety of remarkable

phænomena. For example, vaſt rocks of granite, projecting from the great cataract of the Summa into that river. On an iſland called Kimaliſha, lying between the mouths of the rivers Shuya and Soroka, off the coaſt of the White-ſea, we have in the granite veins of micaceous earth richly mixed with a beautiful brown frequently glandulous, with granites and green tranſparent ſhorl; and between Kemmi and Keret are very large ſheets of muſcovy glaſs, produced by ignition * from a coarſe-grained granite. — Departing from the Voytzer mountain towards the eaſt, we perceive nothing but the ſandy plain diverſified with moraſſes, lakes, and rivulets, from which riſe conſiderable ſand-hills mixed with granite, quartz, and pebbles of hornſlate, which farther eaſtward interchange with layers of chalk and gypſum, in which multitudes of petrified marine animals are ſeen.

Leaving again the beforementioned martial waters, and taking a farther range and more to the weſtward, from the Onega towards Pertnavolotok and Muun-ozero, the trapp-ſtratum proceeds in its ſimple ſtate for the depth of forty feet and more, conſiſting of a blackiſh clay copiouſly mingled with delicate particles of iron

* Muſcovy glaſs by ignition is not allowed by mineralogiſts in general.

and

and flat grey ſquares of feldſpar, wherein, in this vein, were ſeveral copper-pits, formerly very yielding, but are now exhauſted, eſpecially thoſe known under the names of Nadejeda and Niſſelſkoi, together with that called the ſilver pit, on ſtrong courſes of quartz and ſpar, which were worked for a ſpace of fifty years and upwards to a conſiderable depth. — From theſe pits the mountains tend north-weſtward towards the borders of Lapland; yet their principal veins ſtill continue to the north, or rather from the north. Their prevalent ſubſtance continues to be for the moſt part trapp, containing ſuperficial veins filled with copper-pyrites. Several of a ſimilar ſpecies are ſeen at Svetnavolok, where the mountain riſes quite apart from the reſt, and ſingle. — Some of theſe mountains are covered with blocks of quartz of an aſtoniſhing magnitude. In many places the trapp is changed for ſerpentine, of a pleaſant green colour, as at Sludina-kupſka, where a beautiful ſerpentine, ſprinkled with copper-pyrites, ſpotted with yellow and black, and capable of a fine poliſh, is found in abundance.

From Svetnavolok the mountains proceed farther to the north, at firſt bold, then gently, as far as the parts adjacent to the lake Pell; thence purſuing their courſe to the lakes Uſt

and Tor, and are covered with huge maſſes of granite, quartz, and hornſtein; at Uſnokontza, and about the Kuman lake, there riſes a talcky micaceous ſchiſtus out of the trapp. Theſe mountains reach to a conſiderable height at Moſelka, and again toward the weſt reſign the higheſt place to the granite. From the Kuman lake the trapp-mountains run, with fewer changes, weſtward about the lake Vyg, to Sondala, and terminate in a direction almoſt due north, at the weſtern bank of the river Vyg, near the gold mines of Voytz.

About Sondola, particularly towards the eaſt, the mountains riſe to a conſiderable elevation, and contain, as their chief mineral ſubſtance, a ſtratum of quartz ſomewhat mixed with clay. However, they only riſe ſingly, as the foot around is entirely covered with moraſſes or lakes. In ſome are perpendicular veins of quartz, with galena, ſome copper-pyrites, black ſparry lead-ore, markaſite, ſulphur-pyrites, and ochre. In other of the like clefts appear alſo blue copper-ore, great nodules of copper-pyrites, ſpar, and quartz cryſtals; in others again pitch-ore of copper, vitreous copper-ore, cryſtallized blue copper, ſpecular iron-ore, &c.

The Bear iſlands in the White-ſea conſiſt partly of granite, and partly alſo of trapp. The

granite bears a reddiſh feldſpar, quartz, and every where but little hornblende. The veins of lead that have been here explored extend, as I am told, in the granite.

The ruſſian ſhare of Finland is throughout a mountainous country. Towards the north it contains a number of granite mountains, and enormous blocks of the ſame quality. But more to the ſouth, and chiefly in the region of the Ladoga lake, are numbers of chalk-ſtone, marl, ſand, and ſlate mountains. In ſome, ſpecimens of copper and lead have been brought out; iron-ore abounds, not only in the government of Olonetz, but alſo in thoſe of Vyborg and Archangel.

In general it appears from what has been ſaid, that the main ridges, or the greateſt elevations of theſe mountains, come from Sweden; and extend partly from weſt to eaſt, beyond the northern coaſts of the Baltic, and the lakes of Ladoga and Onega, towards and through the White Sea, but partly hold their courſe out of Lapland too, from the north to the ſouth. For better diſtinction, (as the name Northern is too general,) we might more properly ſtyle theſe the Lapland mountains. From their outward form, it is clearly manifeſt that they have undergone very violent revolutions; as they appear,

for the moſt part, extremely broken and incomplete. Their figure is very frequently ſharp and prominent; but their height, on the whole, very moderate; though there are many, eſpecially in Lapland, that are never entirely diveſted of their ſnow. The higher, namely the principal mountains of theſe parts, conſiſt of granite, trapp, hornſlate, gneiſs, and flaky chalkſtone, and probably likewiſe of porphyry and ſerpentine-wake. About the Onega and Ladoga lakes, in the ſouthern part of Finland, &c. many of the mountains conſiſt merely of thick, not unfrequently red-ſpotted chalkſtone. It is a circumſtance peculiar to theſe parts, that in the moraſſes, bogs, and low-grounds, they contain an extraordinary quantity of granite blocks, frequently of a prodigious ſize. It was from this place that the great rock on which the ſtatue of Peter I. at St. Peterſburg ſtands was fetched. The whole of this mountainous country is uncommonly abundant in water, being as it were overſtrewn with lakes, rivers, cataracts, brooks, and marſhes. In the Baltic and the gulf of Finland, in the Ladoga and the Onega lakes, and in the White-ſea, an innumerable multitude of iſlands appear. — The interior mineral quality of all theſe mountains, as appears from what has been ſaid above, has not hitherto been found

to

to be remarkably rich, and what gold, ſilver, copper, and lead courſes have been explored in them, were preſently exhauſted. Iron, alone, they ſtill contain in great quantities, and this, for which there are works in many places, is, if we except marble, granite, ſome window-mica, and a little labrador ſpar, ſometimes found in the blocks of granite, all that is now got from theſe mountains.

Beſides ſeveral rivers, which, like the Neva, moſtly take their origin from the lakes hereabouts, not any large river originates from theſe mountains; though the vaſt lakes of Ladoga and Onega, and a multitude of inferior note, are in their neighbourhood.

Many of the mountains are bare; but the greater part of them, and particularly the vallies and lowlands, are clothed with foreſts. The kinds of trees here are moſtly the black pine, the birch, the common fir, and the larch. The foreſts in the parts about the Onega lake are of very great extent. — The generality of the vallies and lowlands contiguous to theſe mountains are of a black bog-mould, others of wellſand, but ſome are fertile enough, and decked with fine meadows, where the breeding of cattle is the principal ſource of maintenance to the inhabitants. In Lapland, and in ſome other northern diſtricts, wood ſucceeds but badly, and

moſt

moſt of the vallies are overgrown with moſs, which is a welcome fodder to the numerous rein-deer of theſe parts. In the northern ſituations the vallies are by no means rich in plants; yet many of the low grounds are amply ſtored with berries and a variety of muſhrooms. But, on the other hand, theſe countries abound in wild animals and an inconceivable quantity of both land and water fowl of various denominations.

2. *The Valday mountains.*

Theſe mountains, whoſe ridges we travel over in going from Peterſburg to Moſco, are probably but a continuation of the Lapland mountains already deſcribed. They were known to the antient geographers by the name of Mons Alaunus. At preſent they are indifferently called Vhiſokaya Ploſtchade, high riſing ground, or the mountains of Valday, from the town and the lake Valday which are ſituated on their tops.

At no greater diſtance than 10 verſts from St. Peterſburg, on the Moſco road, we already ſee great quantities of maſſes of granite ſtrewed over the fields around, on which the feldſpar is almoſt entirely effaced *. The ſoil is at firſt, and as far as 20 verſts, mere moor ground. At Slo-

* *Verwittert.*

venka,

venka, 22 verſts from St. Peterſburg, we firſt meet with ſome clay-hills. Farther on, the ountry again becomes ſwampy and ſandy; but at the ſame time ſtrewn with vaſt numbers of blocks of granite, ſome of them enormouſly large. Among theſe maſſes are alſo large blocks, with radiated and lamellated ſchorl. Till we get upwards of 100 verſts from the reſidence, the country is every where low, and we travel through almoſt one continued foreſt; but now it becomes ſomewhat higher, and the ſoil more clayey. We likewiſe come to ſeveral villages. Large granite rocks are here particularly numerous. Having again paſſed ſeveral great moraſſes, we reach Novgorod, in a country thronged with hills of marl, ſand, and clay. The well-ſand, whereof a great part of the way already paſt conſiſts, is in many places of a reddiſh hue, and every where mixed with many granite, quartz, and chalkſtones. To the right of the great high road, and ſouthward from Novgorod, lies the Ilmen lake, in the parts adjacent to which are many chalkſtone-beds, with bridges over them, petrifactions, and ſalt-ſprings. The laſt-mentioned are at Mſhaga, Saltzveckſha, Ouglenka, and Staraia-Ruſſa. On leaving the laſt of theſe towns, we have the Seliger lake and the ſources of the Volga in the ſouth-eaſt. We croſs the river

river Lovat, and proceed along the Pola, as far as the mouth of the impetuous river Ivan. Here, about the Ilmen lake, and in nearly the ſhape of a creſcent, ariſe the Flotz hills, which gradually, on the Shelon beyond Saltzi, on the Lovat, about 20 verſts below Cholm, on the Mſta at Belſkoi-voloſt, and on the Siæs at Tichvin, increaſe to a very eminent mountain-ridge. Below the mouth of the Ivan or Javan, along which the ſtoney ſtratum, as about the ſources of the Siæs, is the higheſt and the ſteepeſt, flows the Pola for ſeveral verſts over a bed of marl and ſand ſlate. At this place there is a great deal of potter's clay, of which all kinds of earthen veſſels for common uſes are made.

Following the Moſco road from Novgorod, acroſs the mountains, to the diſtance of 30 verſts farther, we have a hilly ground, partly of ſand and partly of clay, to paſs over, on which the blocks of granite, quartz, and ſand ſtone are very numerous, and of conſiderable bulk. About Novgorod the earth is in ſome places ſo loamy and heavy, that great clods of it lie upon the fields, and prevent the coming up of the ſeed. Near Bronitza, a ſpacious village on the Mſta, lie a great many granite ſtones, ſome whereof are extremely large; eſpecially thoſe that one ſees on a pretty high hill, on which there ſtands a church.

The

The largeſt lie moſtly on the north declivity of the hill. On a particular ſpot, upon the ſhore of the Mſta, there is a bed of quartz-ſand at leaſt three arſhines in depth, under which runs a layer of clay. Hence to Bolotnitza the ground is ſtill much more hilly, and the granite blocks more numerous. Among theſe there are alſo many pieces of jaſper, trapp, and quartz. From this village to the town of Valday is a diſtance of 44 verſts. Nothing is ſeen here but great hills covered with ſand, and frequent maſſes of granite. On theſe hills, where, however, we never once ſaw the naked granite puſhing upwards, the granites are of a variety quite peculiar. They are found from the fineſt grain, up to blocks of very large dimenſions, and of red, grey, bluiſh and blackiſh colours. Sometimes the quartz, then the feldſpar, one while the horn-blende, at another mica, and at another a fine needle-ſhaped ſchorl, has the aſcendant. Together with the granite there is alſo found much quartz, ſome porphyry and jaſper, and pieces of ſchneideſtein, or ſteatites. Of the latter ſort Mr. Hermann found, among others at the village Votſkoy, about 324 verſts from Peterſburg, a large block (not rounded off) of upwards of 100 pood in weight, having many within-lying brown ſpiculæ of ſchorl and ſmall tranſparent red-brown granites. The

country

country about Valday, being the higheſt point of the mountain, is extremely pleaſant. Fine, flow-riſing hills, a charming pellucid lake, with an iſland on which ſtands a noble monaſtery, delightful groves, an extenſive ſcenery, forming the moſt inviting variety. One ſcarcely thinks himſelf on the mountain, and is almoſt inclined to take this region for a kind of plateaux, ſo gently do the mountains raiſe their heads.

At a few verſts from Valday the road begins to decline very faſt. The granite blocks on the mountains covered with ſand and clay, are ſtill in great numbers, but by far not ſo large as on the oppoſite ſide. There even already appear a good many petrifactions in chalk and flints. The latter are frequently of the jaſper kind. — Towards Viſhnei Volotſhok the road goes again over little hills, ſwampy and well-ſandy ground. On many plots, and even till within 20 verſts of Viſhnei Volotſhok, there is a multitude, and ſome of them very large blocks of granite. Several of the wellſand hills contain lumps of granite, quartz, ſandſtone, limeſtone, and flints, all together, in great numbers. It is remarkable, that we here meet with many blocks of ſandſtone, while they are very rarely to be ſeen on the north-weſt ſide of the mountain. — Between Viſhnei Volotſkok, and eſpecially in the diſtrict

of

of Nicolſkoi monaſtir, the country is plentifully ſtrewn with petrifactions in fireſtone and chalk-ſtone. Among them are found echinite-ſtalks that are transformed into carnelian.

Between Torſhok and Tver the country is flat, and the quality of the ſoil much like that above deſcribed. They uſe here for buildings a ſort of white marly ſtone, which contains great quantities of broken ſhells, and ſolitary ammonites petrified into chalkſtone. On the other ſide Tver the fireſtones are far leſs common on the ſurface. About Klin we find again ſeveral clay-hills, in which ſtick large blocks of granite and ſand-ſtone; alſo fireſtone, with and without petrifactions, and pebbles of chalcedony. From Klin to Moſco the ſoil is very clayey, but always mixed with ſome blocks of granite. The region about Moſco offers great abundance of beautiful petrifactions, and eſpecially of pyritical ammonitæ into pyrites, prettily embelliſhed with mica of a metallic luſtre. Along the Vachuſa, by the Volga, we ſee myriads of pebbles of all ſorts of colours; and farther on, in the diſtrict between Moſco, Kaluga, Smolenſk, &c. much chalkſtone incloſing great quantities of ſhells of various ſpecies.

The higheſt point of this ridge of mountains is, therefore, Valday. It ſhapes its courſe hither from the north, and appears to take its departure

ture from between the lakes Ladoga and Onega. It then ſtretches acroſs the Mſta, runs between the Ilmen lake and the Seliger, and extends its foot as far as into the governments of Smolenſk, Orel, and Novgorod-Severſki. About its weſtern, ſouthern, and eaſtern declivities, are ſeveral ſtrong ſtrata of chalk and marl, which farther on are loſt in marſhy and ſandy plains.

Some naturaliſts are of opinion that the whole of this Valday chain of mountains is the effect of violent inundations, and that it entirely conſiſts of a chalkſtone ariſen from crumbled and deſtroyed marine productions. Highly poſſible as this conjecture is, it may be no leſs likely that the middle part is a primitive mountain, having granite for its principal ſtratum, which, through length of time, and perhaps even under water, is ſo much decayed as to be in a manner ſmoothed; for, as far as I know, no chalkpit has yet been opened on its ſummit; and how much ſoever ſome blocks of granite on theſe mountains are rounded off, yet we ſee a great many that are ſo but in a ſmall degree. But even if all theſe maſſes were rounded, it would ſtill be no proof that they were all brought hither by the flood. Of thoſe by Bronitza in particular, this would be extremely difficult to believe. I therefore take all theſe elevations, till ſome very

ſolid

ſolid reaſons ſhall convince me to the contrary, to be an original mountain decayed and deſtroyed in its ſurface, on which, round about its declivities, the looſe chalk and marl was floated or depoſited.

Notwithſtanding ſo much is to be ſaid concerning the mineral quality of theſe mountains, no mine has as yet been explored among them. Some ſpecimens indeed, it is ſaid, have been brought up of copper and lead; but the attempt has been proſecuted no farther. There is plenty of iron; eſpecially at Poterpelitz, where it ſeems that a bed of pyrites by accident taking fire, it left large pits, and deep cavities in the earth, which afterwards filled with water, and are now little lakes abounding in fiſh. The heat of the fire, however, muſt needs have been very violent, as the martial parts of the pyrites were perfectly in fuſion, and flowed together into ironſtone, partly porous, partly ſolid, without having left behind any ejections, or other ſigns of this tremendous phænomenon, a burning mountain. It is more certain that the bottom of all the lakes is of this confluent ironſtone. The beds on the Mſta contain a great quantity of ſulphur-pyrites, vitriolic earth, alum, coals, iron-ore, petrifactions, &c. The pyrites are found, of every known figure, and of excellent luſtre. A

bed of coal ſtretches principally about Borovitſk; and ſalt-ſources, chalk-pits, and gypſum, are found in Stara-Ruſſa.

The extreme elevation of the Valday mountains is but very moderate; as the higheſt point is ſcarcely 200 fathoms above the level of St. Peterſburg. Upon them are not only the Valday-lakes, but alſo ſome others of inferior note; and at its weſtern foot, is the great lake Ilmen, at the ſouthern, the Seliger, &c. Of the rivers, ſome take their origin from the mountains, others from the lakes that lie at their foot: the Volga, the Duna, the Volkhof, the Lovat, the Pola, the Tſhagedo, the Kolp, the Dniepr, the Don, the Oka, &c.

Theſe mountains are but ſparingly clothed with foreſts, but ſo much the more with beautiful meadows and fields; hence the grazier's trade is here carried on with conſiderable profit. The ſpecies of wood are, the ſeveral ſorts of pines and firs, the birch, the linden, the aſpin, the alder, &c. The ſoil in the vallies moſtly conſiſts of clay and marl, and is in general fertile.

3. *The mountains of Taurida.*

The peninſula of Krim, from the neck of land where the fortreſs of Perekop ſtands, is all a flat, which gradually becomes higher, till at laſt it riſes into

into lofty mountains, which form the ſouthern ſide of it, and the ſhore of the Euxine ſea. The range of mountains extends from Theodoſia in a ſtraight line weſtwards, quite up to Balbek. At Karaſubaſar two towering pinnacles ſhoot up, and at Akmetchet a very lofty one, which is called Aktau. The ſmaller mountains ſtand diſtinct and ſcattered. It is extremely probable, that this range is partly a continuation of the caucaſian, and partly of the carpathian mountains; and that theſe two principal chains are connected by it; which alſo ſeems apparent from the nature and quality of the mountains oppoſite to thoſe of Taurida, which extend beyond the Danube, through Bulgaria, and are called Pulkanian.

The component parts of the mountains of Taurida are as yet but little known. Thus much is certain, that the greater part conſiſts of chalk-maſſes with petrifactions, and many beds of ſand and marl, and chalk-hills with flints. It is therefore to be preſumed, that in general they are not to be claſſed with the original, but only with the alluvial or depoſited mountains. A part of them are thought to owe their origin even to the ſubterranean fires. However this be, it is ſaid that lead, copper, and iron ores are found in them, as well as jaſper, agate, and mountain cryſtal. In limeſtone, marble, ſlate, ſandſtone,

coals, naphtha, and common ſalt, they are very rich. — The iſle Taman conſiſts merely of beds of ſand and marl, without limeſtone.

Their height, in compariſon with other chief mountains, is but moderate. They are in a great meaſure deſtitute of foreſts. The trees that grow upon them are thoſe of the richeſt foliage, ſuch as oaks, beech, cheſnuts, &c. However what they are deficient in wood, is amply made up for by the rich and beautiful herbs of the vallies.

The rivers that take their riſe from the mountains of Taurida are, the Alma, the Katſha, the Kabarda, the Salgyr, the Karaſſu, and a great number of little ſtreams that in many places form very pleaſing natural caſcades.

4. *The Caucaſian mountains.*

The caucaſian mountains, as far as they have hitherto been explored on the ruſſian ſide, are truly an alpine range, extending, between the Euxine and the Caſpian, from weſt to eaſt, in length about 350 engliſh miles, and towards the north and ſouth in a level country all around. They greatly decline as they approach both the ſeas. The whole range has a tract of about five miles in breadth, where the chain is at its greateſt height, which is covered with eternal ice. Its

breadth

breadth on the northern declivity extends at moſt to 50 miles, and runs along on the prodigious northern plain, which, taken in the quadrature, meaſures 1000 engliſh miles, being bounded on the eaſt by the ſiberian, and on the weſt by the valakhian mountains. The icy ridges, as well as the others, at their higheſt points, conſiſt moſtly of granite, the ſides leaning towards the next mountains of all kinds of ſlate, and the outward ſides of limeſtone, &c. This limeſtone mountain runs in a flat clayey field of 20 miles in breadth, gradually declining, till it ends in a promontory 10 miles broad, which conſiſts almoſt entirely of ſandſtone; and this again runs out afreſh in a clayey plain about 8 miles broad, in which likewiſe numerous ſandſtone-hills ariſe. In this plain common ſalt and natron are met with in great abundance. In the promontory are ironſtone, ſulphur-pyrites, vitriol, petroleum, and warm baths not unfrequent; petrifactions are likewiſe found here, though not in great numbers, moſtly in flint. Specimens of lead and copper are rarely ſeen in the promontory, but in the higher mountains frequently. The ſlate contains alum. A piece of this caucaſian ridge is ſaid to have no waving mountains at its northern termination. As to what regards the quality of its ſuperior regions, it is to be remarked, that the river Hippus in Iberia bears gold, the mountains

in that region are ſaid to be very rich in minerals, and that the gold mines at Cumana were already worked by the Romans; that the mountains on the Kura, and eſpecially in the diſtrict of Azghur likewiſe contain very rich ores; that in the plains of that river are found fine marble, coal, and warm ſprings; in the mountains by the Terek, as far as the village Stephantzminda, there is lead, ſilver, and iron ore; in the georgian province Somghetia, rich ſilver and iron ore, marble, and jaſper; in the circle of Quoetſh copper-ore; in the principality of Tamblut rich lead, ſilver, and gold mines; in the principality of Lori conſiderable copper-mines, good millſtones; in the principality of Unſular rich copper-mines; in the parts about Akdale, gold, ſilver, and copper; and in the province of Albania, marble and alabaſter, iron, warm baths, petroleum, and rock ſalt.

Hence it appears, that the caucaſian chain of mountains is a main courſe, in its higheſt points covered with ice-mounts; that it has its higheſt, high, middle, and fore-mountains, or promontories, the riſings neareſt to the level of the plain; that its ſides are very rich in minerals, and probably, in thoſe parts which are now added to the ruſſian empire, contain a treaſure of the precious metals. Its eminence, on the whole, is conſiderable, and many of the rocky parts very ſteep and prominent. In many of its extremely fertile

vales

vales it is furniſhed with charming woods, conſiſting of excellent foreſt-trees of various kinds. — On the ruſſian ſide of theſe mountains, the rivers Terek, Kuban, Kumma, and a number of ſmaller ſtreams, take their riſe.

For rendering this account as complete as poſſible, I will here ſubjoin a few particulars from what Guldenſtædt ſays of Caucaſus. " The " main mountain," ſays he, " or rather the high " ridge of the main mountain, from which the " whole on both ſides declines and ſinks towards " the ſeas, conſiſts moſtly of ſnow or ice mounts " of a truly alpine height, which, by reaſon of " their local elevation, particularly in ſome open " fiſſures, contain everlaſting ſnow and ice, gene- " rally exhibit bald rock, without any covering " of earth or plants and trees, and in ſome parts " pierce into the clouds. This, which may pro- " perly be called an alpine chain, ſeems to me " not more than 5 to 7 verſts in breadth, and " conſiſts of a granitic ſtratum. — The two " ſides of the high alpine ridge, which form the " main mountain, I take to be, from ſouth to " north, or right acroſs, meaſured in ſeveral " places, on an average, 70 verſts. They ſtand " immediately in the main ridge; and the north " ſide is viſibly ſteeper or higher than the " ſouthern, as it declines in a far narrower or

" ſmaller breadth, or rather only ſinks down to-
" wards one part. — The higheſt ridges of
" Caucaſus conſiſt of granite; cloſe to which,
" both on the northern and ſouthern ſides, are
" mountains of ſlate, and farther on, chalk-
" hills, which terminate in ſand-hills. In the
" latter are found ſulphur, ſulphur-pyrites,
" warm ſulphureous ſprings, petroleum, rock-
" ſalt ſources, nitrous ſalts, bitter ſalts, mag-
" neſia vitriolata, alum, ſelenite, &c. — The
" northern promontory flattens partly at the
" Kuban, and partly over it, and at and acroſs
" the Terek, northwards, in the vaſt, arid,
" clayey, ſandy, ſalt, woodleſs ſteppe, which
" towards the Manytſh is called the kuban, and
" towards the Kumma the kummanian ſteppe,
" and occupies the ſpace between the inferior
" Don and the inferior Volga. — In the north-
" ern track of ſlate, appears ceruſe of lead, which
" contain ſilver, and copper pyrites in ſlaty ſtrata,
" in courſes of quartz and ſpar, in various veins,
" particularly four in the province of Kiſteri in
" the diſtrict of Galgai, on the river Aſſai, be-
" tween the villages Oſai and Cheirechi. Courſes
" of bleyglantz are ſeen alſo above, on the Te-
" rek, in the georgian diſtrict of Kovi, in the
" diſtrict of the old fortreſs Dariella. Other
" lead-ores are found on the river Pog, by the
" brook

" brook Tſhidſhei, near the villages Tſhimeti and " Tſharkau, on the right ſide of the Aradan, of " the Terek, in the diſtrict of Dugor, near the " village Nakatza — The ſlaty mountain near " the Aſſai, is very rich in ores, eſpecially about " the head of the Archoun, the Sundſha, the " Kifil, the Pfok, and the Aredon. About the " Terek, it yields alſo copper and alum. Iron- " ſtone abounds in many parts of theſe moun- " tains. — From all this we may ſafely con- " clude, that mining might be begun and car- " ried on in the northern Caucaſus to great " advantage, eſpecially for Ruſſia; only care " muſt firſt be taken to eſtabliſh ſtrong and " well-garriſoned forts for the protection of the " miners againſt the ravages of the thieviſh " tribes that inhabit the mountains, till they " have attained to a greater degree of civiliſ- " ation, and even themſelves take a turn for " mining *."

5. *The Ural mountains.*

This famous chain of mountains, which forms the natural boundary between Europe and northern Aſia, is commonly called the Ural, or the belt, as if it girted the whole world. The antients gave

* See Güldenſtædt, reiſe, theil i. ſ. 433, & ſeqq.

this

this chain the appellation of the hyperborean and the ryphean mountains, and ſometimes Montes Rhymnici. Under the laſt of theſe denominations the baſhkirian Ural was more particularly deſigned. — The northern Ural they termed Montes Hyperboræos, or Riphæos, and the ſouthern Rhymnicios. The former were afterwards alſo called the Yugorian mountains. Ural is a tartarian word, ſignifying a belt or girdle, by which the Ruſſians likewiſe denote this range; for they call it Kammenoi and Semnoi poyas, that is, the Rock or Earth-girdle. Theſe mountains extend, from ſouth to north, almoſt in a direct line, greatly above 1500 engliſh miles. The mountains between the Caſpian and the lake Aral may be conſidered as their commencement, which attain their greateſt height and bulk about the ſources of the rivers Ural, Tobol, and Emba; from thence ſtretch on towards the origin of the Tſhuſſovaia and the Iſets, and farther on to the ſources of the Petſhora and the Soſva; laſtly, form two great promontories about the karian haven of the frozen ocean; and after being divided by the ſtraits of Weygat, reach their termination in the mountains of Novaia Zemlia. Such is the main courſe of this prodigious chain, which iſſues from the higher aſiatic mountains, is gradually

dually lowered, with ſeveral frequently imperceptible interruptions, and laſtly ſinks in the frozen ocean. — Some conſiderable collateral branches take a weſtern as well as an eaſtern courſe from it. The moſt material that extend from the former ſide are thoſe called Obſchtſchei-Sirt, the mounts of ſeparation, which run out between the river Ural and the Sakmara, and on one ſide unites with an arm coming out of the kirghiſtzi ſteppe on the left ſhore of the Ural; on the other ſide projects into the old kalmuc ſteppe between the Volga and the Ural, and northerly is in conjunction with the ſandſtone mountains which accompany the main courſe of the Ural on the weſtern ſide. — Near the forts of Orſk and Guberlinſk, a part of the mountains run out ſouth-eaſtward into the kirghiſtzi deſerts, and reach to the mountain Ulutau which ſtands about the centre of that region, and is attached to the great Altay. This arm, extending near the abovementioned forts towards the ſouth-eaſt, is called the Guberlinſkoi mountains. — Another courſe, ſmaller than the foregoing, runs ſouth-eaſtward between the rivers Ural and Ui, under the name of Okto Karagai, through the open ſteppe of the middle horde of the Kirghis-kaiſaks, and then purſues its way, under

under the appellation of Alginſkoi-Sirt, towards the Irtiſh and the Altay mountains.

The whole Ural chain may be aptly divided into three main parts: 1. The kirghiſtzi Ural, which extends from the Caſpian and the Aral, and eaſtward out of the great ſteppe of the Kirghis-kaiſaks, as far as the origin of the Tobol and the Yemba. 2. The Ural rich in ores, properly implying the Ural ore-mountains, which takes in the whole mountainous track, with its weſtern and eaſtern appendages, from the riſe of the ſaid rivers and the Guberlinſkoi mountains, quite up to the ſources of the Solva and Kolva; and 3. the deſert Ural, extending from theſe rivers to the frozen ocean. The Ural that abounds in ores may be again ſubdivided into the orenburg, the ekatarinenburg, and the verchoturian Ural.

This main courſe of the Ural mountains has one peculiarity, that it declines incomparably more on its weſtern ſide than on the eaſtern, and on the former is accompanied by a conſiderable track of collateral ridge, very rich in copper, and conſiſting for the moſt part in ſchiſtoſe ſandſtone.

The higheſt mountain of the Ural chain is in the Baſhkirey, (or in the orenburg Ural,) and

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in verchoturian Ural. Yet the former far exceeds the latter. They are moſtly met on the ſide of the range inclining to the weſt; as, for inſtance, the Iramel, Pſetak, Taganai, Dſhigalgo, Ageſhurdyk, Imen or Yamontau, &c. But likewiſe on the eaſt ſide are ſome very lofty heads; for example, the Irentik and Karantaſh, from which latter the river Ural takes its birth. In verchoturian Ural the greateſt elevations are the Voſtroi-kammen, the Konkeſhefſkoi-kammen on the Lobva, and the Pavdinſkoi and the Koſvinſkoi-kammen on the Tauda. Some of them, as the Ageſhurdyk, the Dſhigalgo, the Taganai, the Komkeſhefſkoi, Pavdinſkoi, and Koſvinſkoi kammen, are in ſeveral places covered with eternal ſnow. The ekatarinenburg Ural contains the eaſieſt mountains, thruſting up their ſummits for the moſt part only in hemiſpheres of greater or ſmaller dimenſions.

The kirghiſtzi Ural is almoſt entirely unknown to us; and we are not much more acquainted with the great deſert Ural. However, it is thought the latter goes on increaſing moſtly northwards, over the ſource of the Soſva, and at laſt ſtretches, almoſt parallel with the Oby, towards the frozen ocean; where it ſends out a branch of ſchiſtous mountains to the weſtward, which, with another neck of land, forms a bay

in the Oby, terminating as if ſhattered to pieces, with a part of the ſame ſchiſtous quality, on the coaſt; but running on with its ſtrongeſt part to Novaia Zemlia, and perhaps iſſues alſo a branch weſtward through the lake, which is full of rocky iſlands, quite to the lapland mountains.

The Ural chain is of itſelf a main mountain, whoſe higheſt ridges, for the moſt part, conſiſt of granite, and of all the properly primitive rocky materials; the ſides being more of ſchiſtus and wakes; the fore-mounts, or promontories, eſpecially on the weſtern ſide, of ſandſtone, chalk, and gypſum, and the beds of marl, clay, ſand, &c. But this ſtatement admits of ſeveral exceptions. Thus, for inſtance, we ſee that the granite puſhes upwards not only in the higheſt, but alſo in very low points; that on the high ridges, together with the granite-knobs, there are likewiſe in many places porphyry, gneiſs, mica ſpathoſa, verd, ſerpentine, ſand, and marl-ſtone, micaceous ſchiſtus, and lapis calcareous ſalinus, which frequently ſeem to be laid on the granite, but often only placed beſide it; and that in the fore-mounts and beds, chalk-ſtone, ſchiſtus, ſandſtone, and gypſum, are ſo interchanged, that it is impoſſible to ſay which of theſe properly ſerves as the ſuppoſitum to the other. — The orenburg Ural has whole knobs of

of ſolid horny quartz, and many mountains of extenſive compaſs; for example, the Guberlinſkoi, which almoſt entirely conſiſt of fine jaſper. The ſchiſtoſe track, or what is called the mountain-gangue, is not much more plainly perceivable on the eaſtern ſide of the principal ridge, than on the weſtern, where it ſeems almoſt entirely to fail. Gneiſs, micaceous ſchiſtus, pot-ſtone*, grey marl, and ſerpentine wake, grey clay ſchiſtus, trapp, and jaſper, interchange without any apparent regularity, and are variouſly interrupted by protruding lapis calcareus ſalinus. The caſe is juſt the ſame in the eaſtern ſub-mountains, with the thick and broken (moſtly free from petrifactions) chalkſtone, gypſum, black ſchiſtus and ſandſtone, beds of marl and clay, &c. the ſucceſſion whereof are different in almoſt every region. — On the weſt ſide ſucceed, moſtly cloſe by the high mountain, a grey and black clay ſchiſtus interchangeably with fine ſandſtone; and a powerful mountain, extending from the Belaie northwards over Solykamſk, of thick chalkſtone, which forms in many places very high and broken mounts, and weſtwards is accompanied in its whole length by hills of gypſum and ſandſtone, in the former whereof rich ſalt-ſprings, and in the latter very productive beds of copper, lie concealed. Where

* Or, *Lapis ollaris.*

this

this chalk-mount borders on the higher mountain, numerous and large neſts of iron-ore are every where met with. Whereas on the eaſt ſide, and on the ridges of the mountain, the richeſt copper and many iron ores break in the parting of the ſaline chalkſtone with marl-wake, the moſt powerful couches of iron-ore, of porphyry, and the gold-ore in the gneiſs.

In minerals the Ural mountains are very rich. We find beautiful ſorts of granite, porphyry, excellent jaſper, fine quartz, petroſilex, pebbles, whet-ſtones, flints, agates, chalcedonies, large mountain cryſtals, ſmoky topazes*, fine amethyſts, chryſolites, porcelain and pipe-clay, bolus, ſhelly feldſpar, ſerpentine, pot-ſtone, window-micæ, aſbeſtus, and amianthus; beautiful marbles, table ſchiſtus, gypſum, flowers of ſpar, turf, coals, mineral oils, naphtha, native ſulphur, markaſites; foſſil ſalts, ſources of common ſalt, bitter lakes, alum, vitriolic earths, ſaltpetre, natron; iron, copper, gold, and ſpecimens of ſilver and lead. For working of the gold, copper, and iron, very extenſive and productive fabrics are here erected.

The Ural mountains are alſo very amply endowed with woods. Their trees conſiſt of the ſeveral ſorts of pines, birch, fir, cedar, larch, aſpin, alder; and on the ſouth-weſtern ſide a few oaks, elms, lindens, &c.

* Smoky topazes, mean brown rock cryſtals.

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In the vallies adjoining to this range of mountains we every where meet with rich and verdant glens and dales and meads in alternate ſucceſſion; accordingly the breed of cattle is not inconſiderable. Of wild beaſts and birds they contain great plenty. Among them may be reckoned ſables, beavers, rein-deer, elks, &c.

In the ordinary courſe of years they abound in waters; and the various elevations are copiouſly ſupplied with beautiful pellucid lakes, ponds, and numberleſs ſtreams, all teeming with fiſh. The principal rivers that here take there riſe are: the Soſva, the Tura, the Iſſet, the Ui, the Tobol, the Yemba, the Ural, the Belaia, the Tſhuſſovaia, the Kamma, the Petſhora, &c.

6. *The Altay mountains.*

The mountains which, on ruſſian ground, belong to the ſyſtem of the high rocky ridges of Altay, take up the whole breadth between the Irtiſh and the Yeniſſey. They terminate, or rather depart from that mighty chain of mountains, which, as far as is hitherto known, ſtretch, in a ſouth-eaſtern direction, from the fortreſs of Sempalat on the Irtiſh, unite beyond the Yeniſſey, with the ſayane and baicalian, and in Dauria with the arguſinian or nertſhinſkian mountains, and thus fix the limits between

Siberia and the chineſe empire from the Irtiſh to the Amoor.

The Altay mountains are called by the Chineſe, Altai-alin, and Ghin-ſhall, which ſignifies the Gold Mount. They are divided into the great and the leſſer Altay. The great Altay ſeparates the mongolian Tartary from the empire of the ſoongorian Kalmucs and a ſmall part of Bukharia toward the weſt. This range proceeds in various windings toward the north-north-eaſt, here throws out ſeveral conſiderable ridges, between which the main ſources of the Yeniſſey, the Oby and the Irtiſh riſe, through Soongoria to the north-north-weſt, where they enter in conjunction with the leſſer Altay. The leſſer Altay parts Soongoria from the government of Kolhyvan, through which the aforeſaid ſtreams purſue their courſe over a great extent of country.

The greateſt height of theſe mountains is without the limits of the ruſſian territory. They run out in general from one of the higheſt points, known by the name of Bogdo, over the ſources of the Irtiſh, north-weſtward between that and the lake Teletzkoi-ozero, and by this lake and the Yeniſſey north-eaſtward into the ruſſian empire. The whole of the ruſſian ſhare of the Altay mountains, therefore, naturally falls into two great halves. One of which compre-

hends the entire ſpace between the Irtiſh and the Bii *; and the other, the ſpace between the Oby and the Yeniſſey. For the ſake of more accurate intelligibility, the former is ſtyled the kolhyvan, and the latter the kuſnetzkoi mountains. Both include the greater part of the government of Kolhyvan, and belong entirely to the department of the kolhyvano-voſkreſenſkoi mine-works. The former half, namely, the mountains between the Irtiſh and the Bii, or Oby, might, on account of its mineral wealth already known, be ſtyled by way of eminence, the Altaian ore-mountains.

Of all the mountains in the central Aſia, thoſe of Altay ſeem the mightieſt, the moſt extenſive, and the moſt conjoined. They do not, however, throughout bear the name of Altay. The lofty track which parts the government of Kolhyvan from the chineſe Soongoria divides into two great joints. One from the Irtiſh to the lake Teletzkoe and the head of the Abakan, is properly the leſſer Altay, or Chrebet Chalta; the other, from the Abakan to the Yeniſſey, is called Sabinſkoy Chrebet. In the former are the greateſt elevations of the kolhyvanian, and in the latter thoſe of the kuſnetzkian moun-

* Farther on the Oby.

tains; they therefore form the basis of all the ribs or mountain-tracks that shoot out from it to the north-west and to the north, which at last lose themselves towards the Frozen-ocean in prodigious plains; while towards the south, as it appears, they still continue to soar to an uncommon height over a long and broad extent of territory.

Right in the midst of these tall mountains, says Dr. Pallas, and on the frontier line between the soongorian and mongolian deserts, Bogdo-Dola, or Bogdo-Alim (the almighty mount), so eminently famous amongst all these nations, lifts its pointed heads; which, if not one of the highest, is yet, by its craggy, steep, and irregular form, with all the appearance of having been thrown up by some violent agitation of the earth, the most striking of all the powerful mountains of these parts. North-westward from it, all the main mountain as far as Altain-Kul, or Teletzkoe-ozero, is called the Golden Mountain. Eastwards towards Mongoley, more to the south, runs a strong mountain Changay, and southwards a powerful snow mountain Massart, which either annexes to the tybetan, or to the northernly mountains in India. Lastly, westwards the main mountain throws out an arm, mostly bare of forests, and all over as if studded

with

with rocks, called Allakoola, i. e. the Checquered Mountain, by the Tartars Ala-Tau, which connects with the kirghiſtzian Alginſkoi-Sirt. Between the Muſſart and the Alak ariſe the rivers Sir, or Shir, and Tallas, which flow to the lake Aral, northwards out of the Arakoola the Ili rolling its waters to the Balkaſh-noor, the Emil and the Tſhui, which is ſometimes dry; and north-weſtward from the Bogdo the upper Irtiſh takes its ſource. — Probably the great Altay mountains concatenate with the tybetan mountains by the Muſſart, and perhaps by other chains. For all the deſerts between Siberia and India, and the eaſtern Bukharia, are nothing but alternate hills and plains, and extremely rocky. That alſo the Altay mountains muſt make an uninterrupted partition between the weſtern ſteppes and the eaſtern regions, is ſhewn by the ſteppe-animals, particularly the antelopes or ſteppe-goats, who ſhun the mountains, and even in Aſia go no farther than to the weſtern range of the Altais, and are come from it northwards to the woody regions that accompany the Oby. — The ſnow-mountain, which appears northwards on the ſiberian frontiers from the Irtiſh-tau between the Buktarma and the Katunia, and quite into the angle formed by the rivers Ina and Belaia which flow into the Tſharyſh, is, as it

were a diviſion, a ſhort branch, a nook of the great Altais, which by ſome is uſually called the little Altay, and which darts its ſtupendous pinnacles above the clouds. It riſes every where bold and ſteep, and ſtands (eſpecially in the vale where the Ina unites with the Tigerek) like a towering wall, behind which the mountains riſe conſtantly higher in irregular gradations, and at laſt ſtrike up in ſeparate points. The ſame ſteep vale there parts the ſchiſtoſe mountain from the chalk-ſtone mountain, which hence ſpreads northwards between the Ina and the Loktefka quite to the Tſharyſh. Over the ſchiſtoſe mountain the ſnowy ſummits riſe conically out of a granite mixed with ſchorl and mica. The ſame granite ſhews itſelf again in chalky promontories, with the ſchiſtus lying on it; and forms the Revnovaia Sopka, as it is called, at the ſame time, right in the boſom of the chalky mountains, the ſtill loftier Sinaia Sopka. Granite appears likewiſe throughout in low, rocky, craggy mounts and ſingle cliffs, between the rivers Ubo and Alay, where the mountain has already fallen deep towards the plain, and likewiſe about the lake Kolhyvan. The rich ore-mountain of Kolhyvan places itſelf immediately between and about this granite-ſtock; and thence ariſes an apparent confuſion in the ſtrata

through

through the whole of the Kolhyvan ore-mountain. On the Irtiſh the ſchiſt-mountain extends latitudinally as far as Semipalatnaia. The wavy red ſand ſchiſt ridges between the Shulba and the Ufa, ſeem to reſt upon the ſchiſt. Between the Alay and the mountains ſtretching to the Irtiſh, is alſo a perfect plain, without a trace of hilly ſcites, with many ſalt-pools and petty lakes, and the promontories every where gently decline towards this plain, and are completely deſtitute of foreſts. Genuine hornſchiſt and jaſper are here not to be found in the whole mountain, neither, except the outermoſt hills that proceed by the Irtyſh below Semipalatnaia, is any true floets mountain perceptible.

The principal part of the Altay mountains that fall to the ſhare of Ruſſia, is the range of Kolhyvan, or the proper ore-mountains of Altay. For the more convenient comprehenſion of it, it may be reduced to the following ſubdiviſions, namely: 1. The Kolhyvano-voſkreſenſkoi. 2. The Korbolikinſkoi. 3. The Alaiſkoi. 4. The Ubinſkoi. 5. The Buktarminſkoi. 6. The Teleſkoi; and, 7. The Tſhariſkoi mountains.

The KOLHYVANO-VOSKRESENSKOI mountains have their appellation from the adjacent lake Kolhyvan, (which has given its name to the whole chain between the Irtiſh and the Oby, as

as to the government,) and from the firſt copper-mine, called Voſkreſenſkoi. It is bounded on the ſouth by the granitic ridge which parts this mountain from the korbolikinſkoi. It is confined to the eaſt by the deep valley in which the line of the preſent fore-poſts is drawn, and by the lofty tigeretzkoi ſnow-mountains; and bounded on the north by the river Tſharyſh, whoſe courſe is accompanied by conſiderably high ſchiſt and chalk mountains; towards the weſt it loſes itſelf in the north-weſtern ſteppe. — The greateſt elevation of theſe mountains is the Sinnaia-Sopka *, which is computed to aſcend 2814 pariſian feet above the level of the ſea. At its middle and greateſt height it conſiſts of a moſtly coarſe granite, conſiſting of ſpatum campeſtre, quartz, and blackiſh micæ. On the north-ſide it abuts extremely ſteep againſt the Bielo lake, under which appear leafy clay and table-ſchiſt which reſt upon the foot of the blue mountain, and covers the granite between it and the tigeretſkoi granatic ſnow-mountain, ſtill 30 verſts farther to the eaſt. On the eaſt ſide it in like manner ſtruts boldly againſt the great Biela, and more to the weſt, in the angle formed by the little Biela with the great Biela. In this angle, at the foot of the Blue mountain,

* The Blue mountain.

is

is found ſchiſtus and chalk-ſtone, in which latter are ſome little cavities containing lapis calcareus ſtalactites. From the little Biela the mountains riſe again towards the ſouth, elevating themſelves to the Revennaia Sopka, or Rhapontic ſummit, which is ſurrounded by the ore-mountains, and conſiſting of ſchiſtus corneus, mixed ſparingly with mica ſpathoſa and crumbs of mica campeſtris, in which latter are a few ſmall hollows wherein are found ſtalactites. Towards the weſt, from the blue mountain, runs the granite-mountain range, in bulk from 15 to 30 verſts, interrupted by a multitude of vallies, proceeding 100 verſts to the Alay, and there unites with the alaiſkoi granite hills. The northern foot of this granite-ridge runs under powerful ſchiſtus and chalk mountains, in and between which the two firſt kolhyvan mines were dug.

Another mighty ridge of granite runs from the Blue mountain northwards to the river Tſharyſh, under-run on the weſtern ſide by ſchiſtus and chalk which again farther on extend to the yaroſſkoi and the tigeretzkoi ſnow-mountain. The component parts of all theſe granite-ridges, are various; one while the feld-ſpar, another time the quartz has the aſcendant; now the component parts are coarſe, and then ſo delicate, and ſo poor in micæ, that one might be

be induced to take the granite proceeding from them for ſandſtone.

This tract of mountains is uncommonly rich in ſilvery, copper, and zink ores; for in this tract lie the old and firſt Voſkreſenſkoi, and Kolhyvaniſkoi, Golovinſkoi, Bogoyavlenſkoi, Bobrovnikoſſkoi, Kleopinſkoi, Guſtokaſhinſkoi, Medvedeffkoi, Loktoffkoi, Beroſoffkoi, Murſinſkoi, Monaſtirſkoi, and Tſhakyrſkoi mines, of which, however, ſcarcely any are in work at preſent.

The KORBOLIKINSKOI mountain has its name from the brook Korbolikha, which runs through it. It is incloſed from the ſouth, the eaſt, and the weſt, by granite-mountains; but on the north-eaſt is bounded by the great Biela, accompanied by ſchiſt and chalk mountains. It conſiſts, except in ſome few points which are covered with ſea-bottom-materials, for the moſt part of clay-ſchiſt, marlwake, lapis corneus, and quartz, which here and there are underlaid by granite and porphyry. Notwithſtanding the height of theſe mountains, between the origin of the Korbolicha and the little Biela, is conſiderable, yet the mountain on the great Biela, ſuch as the Revennaia-Sopka, and the Karaulnaia-Sopka remarkably diſtinguiſh themſelves on account of their ſingle ſummits. Its mineral conſiſts of a ſchiſtoſe marlwake and hornſchiſt, wherein here

and

and there hornblend and crumbs of feldſpar are to be met with.

The chain of mountains in conjunction with the north-weſtern and ſouth-eaſtern rivers of the Revennai Sopka, the Blue mountain, and the kolhyvan granite-mountain; and in the ſouth-eaſt, after they have gone about the kliutſheffkoi majak, terminate at the foot of high granitic ſnow-mountains. The Revennaia Sopka is the higheſt point of theſe mountains, being eſtimated at 2213 pariſian feet higher than the Shlangenberg; it is ſaid not to conſiſt of granite, but of firm hornſchiſtus. In this torbolikinſkoi tract of mountains, the richeſt of all the Altay mine-works are carried on. For here is the crown of them, the Slangenberg (Smeinogorſkoi-Rudnik); and beſides that, the Maſhinſkoi, the Markſheiderſkoi, the Karamiſheffkoi, the Striſhkoffkoi, the Matveyeffkoi, the Tſherepanoffkoi, the Kommiſſarſkoi, the Goltzoffkoi, the Ivanoffkoi, the Piktoffkoi, the Lazurſkoi, the Haufenſkoi, and the Semmenoffkoi mines.

The ALAISKIAN mountains compriſe that range which advances from the origin of the Alay to the two ſides of this river, and between it and the Ouba and Irtiſh, and runs out into the great ſaline plain, which is ſkirted by the Alay, the Irtiſh, and the Oby. This range, as far as the

the ſtream Shemanaika, falling into the Ouba, and on the branch of the Alay. Talofka, conſiſts almoſt entirely of granite and porphyry, riſes between the Oby and the Irtiſh to a very conſiderable height, and ſeems to under-run the korbolikinſkian and ſolotaraſhian mountains, which, between the Irtiſh and the Alay, is properly the fore mountain of the Alaiſkian. Together with granite and porphyry here is found alſo mica and clayſchiſtus, marlwakes, and ſalinechalk ſtone, on the right of the Alay, (where the granite ridge proceeds down to the lokteſſkoi ſavode,) trapp and breccia, on the Shulba black ſchiſtus, chalk, and ſandſtone, and farther down gypſum, clay, marl, and beds of ſand.

The higheſt ſummit of theſe mountains is mount Sludina in the diſtrict of the Alaiſkoi-ſavode, which is calculated to be 1672 feet higher than the Shlangenberg. From this elevation we ſee the tigeretzkoi and buktarminſkoi (or oubinſkoi) ſnow-mountains, as plainly as though they were only a few verſts off. The pinnacle of this mountain conſiſts of a granite compoſed of feldſpar, quartz, and black micæ, of pretty coarſe grains. In the lower points the component parts are ſmaller, and inſtead of the micæ a hornblend takes the aſcendant. In ſome places both are wanting, and the granite aſſumes a ſandſtone-

ſandſtone-like appearance. At its northern foot, four verſts from the melting-houſes, chalk-ſtone breaks with marine productions. — In this part of the Altay ore-mountains are the mines Medvedeffkoi, Ploſkogorſkoi, Shemaniſhinſkoi, Shulbinſkoi, Solotukinſkoi, Loktefſkoi, &c.

The OUBINSKOI mountains, otherwiſe called the VOBROFSKOI, form, at the ſources of the Ouba and Ulba, a conſiderable ridge, towering in lofty ſummits to high ſnow-mountains, ſending out its branches on both ſides of thoſe rivers, eſpecially between them, and at its foot is bordered by the Irtiſh. The greateſt height of it riſes near Bobroffkaia with porphyry, which in the north and ſouth is frequently changed for granite, whoſe ſummits, one while with gentle, and then with bold aſcents, ſurround the moſt delightful vales, abounding in odoriferous herbs of various kinds. — In the region about the fortreſs Ouſtkamenegorſk, the granite is under-run* by ſchiſtoſe earth, in antient times explored by the Tſhudi, who took pleaſure in mining. Higher up the Irtiſh, as far as the Buktorma, mountains of ſchiſtus frequently appear, in which copper-ore is dug, and which here and there is under-run by porphyry and granite, but in many places are covered with chalk. The mountains in which the ſources of

* Unterteuft.

the

the Ouba riſe, conſiſt of granite, porphyry, marlwake, petroſilex, and quartz. Towards the eaſt the ouvinſkoi ſnow-mountains raiſe their lofty ſummits, which, meaſured with the line, were found to be 5691 engliſh feet above the water of the river Ouba which devolves its pleaſant ſtream beneath its monſtrous cliffs. In theſe mountains have been lately found the filipoſſkoi mines, on the Ulba, which promiſe great ſucceſs; together with the mines talofſkoi, nicolaeffkoi, bereſefſkoi, ilinſkoi, &c.

The BUKTARMINSKOI mountain begins in the ſuperior region of the river Buktarma, at the frontier-heights between the chineſe and the ruſſian empires, declines from the ſouth towards the north and weſt, and accompanies the aforementioned ſtream, on both its ſides, till its confluence with the Irtiſh. It reaches to eaſt and north-eaſt as far as the mountains that run along the Kokuſun, and towards the north up to thoſe that follow the courſe of the Ulba. From the binſkoi ſnow-mountains up to the head of the Uiman (which falls into the Kokoſun) it forms a powerful ridge, riſing almoſt throughout in high ſummits of ſnow, and on this ſide extends its greateſt height to the ſource of the laſt-mentioned river. This huge mountain, as yet very little known, and partly inacceſſible, conſiſts, as far as we know of it, in its higheſt points of various

various kinds of granite, porphyry, and flint breccia. But in its chaſms, and particularly towards the ſhores of the main or moſt conſiderable rivers, different ſorts of ſchiſtus, chalk-ſtone, marl, breccia, and ſand-ſtone are frequently met with. Jaſper is found in abundance, with porphyry, and trapp, in the ſuperior regions. Of the chalk-mountains ſeen in the lower confines of the Buktarma, ſome are very craggy and have a number of caverns. In theſe mountains there has hitherto been but one mine explored, the Buktormniſkoi, with any hope of ſucceſs.

The TELETZKOI mountain has its name from the lake Teletzkoe, (Teletzkoe ozero,) on one of the greateſt eminences of the Altay, and from which the river Oby iſſues. It forms, with its lofty ſummits, the boundary between Siberia and the Soongorey, ſtrikes its powerful ridges down betwixt the lake and the Katunia; and, after having turned round the eaſt ſide and the lake, unites with the kuſnetzkoi mountains. This diviſion is one of the greateſt, but at the ſame time the wildeſt and moſt inacceſſible of all the altaian ore-mountains; hence it is, that its quality and contents are ſtill but very little known. However, thus much we know, that very powerful granite and porphyry mountains are

are in its range, and that the earth near and upon it yields jaſper, flint breccia, hornſchiſtus, white (probably ſaline) chalk-ſtone, coloured marble, blackſchiſtus, marl, ſand-ſtone, and in theſe there are iron, argentaceous copper, and lead ores, naphtha, aſphaltus, &c. The mountains to the right of the Katunaia ſeem to be particularly rich in ores.

The TSHARISKOI mountains are of very great extent. They compriſe the whole ſpace between the higheſt ſources of the Ulba, Ouba, and the Kokoſun (till where the Tſhuya falls into the Kokoſun) and between the courſe of this latter river and the Katunaia, and carries its powerful forked ridges along both ſides of the Tſhariſh, from its origin to its diſemboguing into the Oby. Its direction is from eaſt to weſt and north-weſt; and in the ſouth it is parted, by a rude valley, from the oubinſkoi ſnow-mountains. In ſeveral places it riſes to a great height, heaving up enormous pinnacles, which in ſome parts are covered with never-failing ſnow, ſuch as the tigeretzkoi, the torgonſkoi, the tſhariſkoi, the katunayaiſkoi, the annuyiſkoi, and the italitzkoi ſnow-mountains, which for the moſt part conſiſt of granite, porphyry, jaſper, and flint breccia. The Tigeretzkoi alone, to a conſiderable height, conſiſt of marble, which contains a multitude

multitude of ſea-ſhells. Theſe in general are found to be 4392 pariſian feet higher than the Shlangenberg. One of the higheſt points is the Koſſipnaia-Sopkà, (the ragged head,) conſiſting of monſtrous blocks of hoary granite. In ſeveral places of theſe wild and extenſive mountains, iron, copper and lead ores have been dug up, but no regular works have been as yet ſet up.

The ſecond half of the ruſſian ſhare of the Altaian mountains, namely, the kuſnetzkoi range, is ſtill for the greateſt part, almoſt unknown, and inacceſſible. It may be reduced to two ſubdiviſions, whereof one ſhall compriſe the kuſnetzkoi proper, and the other the kraſnoyarſkoi mountains, together filling the whole vaſt ſpace between the Oby and the Yeniſſey. Theſe mountains throw up, on the Mraſs and between the ſources of the Tom and the Yuſs, ſome very conſiderable ſummits, many of them covered with eternal ſnow. In regard to its inward conſtitution and frame, we have as yet but few authentic accounts. However, from hence are brought various ſorts of granite, porphyry, jaſper, breccia, ſaline chalk-ſtone, marble with ſea-ſhells, horn-ſtone, ſlate, ſerpentine, mountain-cryſtal, chalcedony, and carnelians. On the Kondoma, are productive iron-mines: in the region of the origin of the Tſhumiſh the ſalahirſkoi

ſilver-mines continue to be worked with great expectations; and at Kraſnoyarſk ſeveral copper-mines were formerly worked, but are now abandoned*. In the laſt-mentioned circle is alſo an eſtabliſhment for ſmelting iron-ore, belonging to the merchants Savelief. — The higheſt moun-

* In the diſtrict of Kraſnoyarſk, to the left of the Yeniſſey (ſays Mr. Pallas) the ſchiſtus is ſeen lying quite up to the ſteep ſoaring granite mountain, and is rich in ore; the chalk-mountain is but very narrow about the Teſs and the brook Koxa, and then follow northwards red ſand ſchiſtus and marl ſtratum. Beyond the Yeniſſey we find the ſchiſtus-mountains much more northward ſtill, as far as above the upper region of the brooks Siſine and Oubei, and the river Mana; and the chalk-cliff mountain runs as far as to the confluence of the Mana with the Yeniſſey, and therefore too near upon the town of Kraſnoyarſk, where the Flœtze proceed. The chalk-mountain here ſends out a rib weſtward under the name of Arga, which preſſes weſtwards out of its direct courſe to the Yus, flowing much higher than the Yeniſſey, and its continuation the river Tſhulym. From Kraſnoyarſk north-weſt and eaſtward are pure Flœtze and level country, likewiſe the ſtraight road thence to Irkutſk through nothing but low foreſts, which extend northward as far as the upper Tunguſka, and where at moſt but ſmall fletze ridges appear, ſo that in theſe parts the ſchiſtus-mountain muſt be much leſs powerful, as the granite yet extends in its former breadth and direction, and for example, on the river Ouda, as far as about the brooks Shelma, Nerek, and Sob, where are at preſent the beſt veins of muſcovy glaſs.

tains here to be ſeen in the ſouth are about the ſource of the Abakan, where the famous mount Sabin, or Shabina-Dabahn, raiſes his ſnowy head to a ſtupendous height, and the Ittem, on the borders of the brook Shantigyr.

The major part of the Altay mountains is more bald than woody. The largeſt foreſts are in the low countries about the Alay, the Oby, and the Yeniſſey. The ſpecies of wood are, the pinus ſylveſtris, the birch, the aſpin, the pinus picea, the pinus abies, the alder, the willow, and noble larch-trees *, and cedars. — The principal rivers of theſe mountains are: the Irtiſh and its collateral ſtreams the Buktarma, the Ulba, and the Uba; the Oby, with its main rivers, the Alay, the Tſharyſh, the Tſhulym, the Tom, the Katunia, the Yus, and the Abakan, which falls into the Yeniſſey. The ſuperior regions of the mountains are uncommonly exuberant in waters.

7. *The Sayane mountains.*

The nethermoſt ſnow-tops and granitic main-ridges determine, at the Yeniſſey, and thence as far as the Baikal, the boundaries between Siberia and the Mongolèy; ſo that only the

* Pinus larix.

northern ſide of the mountains belongs to Siberia. The granite-mountain ſtands here very bluff, eſpecially in the region of the Ouſs, which, to the right, falls into the Yeniſſey. The Yeniſſey itſelf rolls forth from between high ſnowy ſummits which hem it in with rocks, into a monſtrous vale; as in general all the ſuperior rivers flow in very high and dreary mountains. Behind the Ouſs is a very lofty mountain, Khoin-Dabahn; and, more eaſtward, over the Ouba, a wide-extended with cragged rocky high-ſoaring ſummits, the mountain Irgentargak, which continues for above 500 verſts, quite up to the ſources of the Beikem and the Shiſhkiſh. Hard by this mountain follows, to the north-weſt of the lake Koſſogol, the frontier-mountain Nukutu-Dabahn (or Khangai), whence the Karin falls into that lake; then, about the origin of the brook Khanga begins the mountain Gurban-Dabahn*, and reaches to beyond the ſources of the river Ouro; where, at a mountain Kiſimktu-Dabahn, begins the great chain Oudin-Dſœn, and, between the Vida and the rivulet Selenga, from north-weſt to ſouth-eaſt, forms the ſiberian boundary. Another branch of lofty mountains, proceeds, under the name of Turon-Dabahn,

* The three mountains.

between

between the ſources of the Dſhida and Tamnik, on one, and on the river Irkut on the other ſide, as far as to the Baikal.

The whole range (whoſe higheſt ridges neareſt to the Yeniſſey, are called, Sayanſkoi-Krebet, but towards the origin of the Oka, Krebet Khandabaga) conſiſts, more or leſs, of ragged granite and porphyry ſummits, which interchange with various kinds of ſchiſtus; and farther onwards, between the Yeniſſey and the Angara, is under-run with powerful floetzes of chalk, marl, clay, and ſand. — The granite in many of the hills, is ſo coarſe-grained, that the beſt mines here are of muſcovy-glaſs. In theſe mountains, about the Yeniſſey, are found numbers of what are called old tſhudi mines; notwithſtanding that their mineral contents are ſtill almoſt entirely unknown; and, except iron-ore, but little has been gained from them.

Though the range is here and there quite bald, yet, for the moſt part, at leaſt in the vallies, it is foreſted. The ſpecies of trees are, the pinus ſylveſtris, the pinus abies, the pinus picea, the birch, and excellent larches and cedars. — The principal rivers of the ſayane mountains are: the Yeniſſey, the Tuba, the Mana, the Kan, the Byruſſa, the Ouda, the Oka, the Irkut, &c.

8. *The mountains of the Baikal.*

This range of mountains has nearly the ſame direction with the Baikal-ſea, accompanying it on both ſides from ſouth to north and north-eaſt, runs down to the weſt on the right of the Angara, where it flattens in a moraſſy ſteppe of prodigious extent; to the eaſt it advances from the origin of the Lena, on both ſides of that river, and here likewiſe dies away in a wide-extended flœtz-ridge. In general it is a very craggy high-thrown mountain, partly conſiſting of granite, partly of flint-breccia and chalk-ſtone. In the inferior regions of the Angara and the Lena its flœtz-mountain greatly declines, and frequently produces coal. From the upper angarian ridge, there runs, as it ſhould ſeem, a branch weſtward, through the region between the podkammenaia and the niſhnaia Tunguſka, away over the Yeniſſey, and conſiſts probably of mere flœtz-mountains. About the north-eaſtern part of the Baikal, the upper Angara, the Mama and the river Vitim, where lie the famous pits of muſcovy-glaſs, all the mountain is granitic *. The mineral contents

* What Mr. Laxmann relates of theſe granite mountains deſerves here to be quoted. " On the ſouth ſide of the " weſt end of the Baikal, which is called Kultuk, a granite- " ridge

tents of these mountains are as yet by far not thoroughly known. The principal of what has been

" ridge extends along that sea. The promontories, above " 50 fathom high, steep, 800 fathom long, and of far " greater breadth, consist entirely of milk-white quartz, " which is seldom known to form whole mountains (1). Then " follows a fine-grained, one while quartzy-micaceous-spa- " tous, and then only quartz-micaceous, granite; and this " composition of granite is progressively reft throughout " in chinks, a curious circumstance but rarely seen in old " granite-mountains, and much doubted of by some oro- " graphers. Some 300 fathom from the quartzy excres- " cence several parallel gangues appear, which on the eastern " declivity, towards the brook Sludenaia, extend from west " to east. The most powerful of them is about 12 feet, the " rest are smaller, and fall almost perpendicularly. The " mighty Salband, I might almost say, the prostrate, con- " sists of black scaly mica. To this succeeds a fine-grained, " greenish, brittle quartz, sprinkled with green micaceous " crystals. It comprehends one third of the whole, and " terminates in a solid feldspar, which fills the northern " and larger portion of the gangue, in which frequently pris- " matic schœrl crystals are inclosed. The schœrl is green, " transparent, or cloudy, of a quadrangular or a pyramidal " form, and some crystals are almost five feet long, and fif- " teen inches in diameter; but these are cubically split; " wherefore it is not possible to get them whole. Also " micaceous crystals are frequently interspersed in the feld- " spar. Lastly, the feldspar lies on the quartzy granite,

(1) In the Ural-mountains, however, several instances of it appear.

been discovered in them, are coals, asphaltus, sulphur-sources, native sulphur, alum, common-salt-sources, lapis lazuli, muscovy-glass, carnelians, natural prussian blue, and specimens of iron, copper, and lead †.

Some

" in which but little spar and mica is interspersed. To " conclude, the gangue is visibly along the steep south- " eastern side of the mountain quite to the water level of the " Sludenaia, and in the holes sandy quartz which the spring- " floods have washed through a grot four fathom deep and " two fathom high. The leafy greenish mica appears, as " was remarked of the schœrl, in prismatic pyramidal crys- " tals of from three to nine sides. — The learned are in- " clined to pronounce the whole region of the Baikal to be " the effect of some great convulsion of nature; but in the " range of mountains about the west end of this sea, which " is called Kultuk, all seems to me to have arisen by a gentle " and easy formation. The forementioned structure of the " mountains shews how the minerals are deposited according " to their quantities, and in conformity to the laws of re- " lation. The crystals may perhaps have already received " their flats and points as they part dry and moist." See Crell's Chymical Ann. 1785, part iii. p. 265. — Of similar gangues in granite, various examples are seen in the mountains of Altai and Ural; especially in the latter the beautiful amethysts, at Mursinsk, are broke out of quartz gangues in granite.

† From a manuscript containing the mineralogical observations of M. Gruber, in the parts adjacent to the Baikal, I extract the following: " The country round Irkutsk, for " some

Some tracts of mountains about the Baikal, for example, the Burgundu and others, are so

" ſome hundred verſts on the Angara, and above a thouſand
" verſts on the Lena, is entirely of the flœtz kind; but theſe
" ſtreams have moſtly high banks. In the confines of
" Irkutſk is a great deal of coal; and, near the city, on the
" bank of the Angara, in a ſubverted mountain, five veins
" of it, each a quarter of an arſhine in thickneſs, at a diſ-
" tance of about two arſhines above one another. — Salt-
" ſprings are here in many places. Not far from the Baikal
" magneſia vitriolata is prepared from the water of a lake;
" and 80 verſts from Irkutſk, on the Angara are manufac-
" tories of common ſalt. From Irkutſk 434 verſts, on the
" Lena, extends a bed of copper-ore, which ſeems to reach,
" for 900 verſts, to the river Kiren. The country, by the
" latter river, is far more hilly, and conſiſting partly of
" chalk-ſtone, whence ſeveral mineral ſources proceed.
" Nor are ſpecimens of copper wanting. Iron-ores and fer-
" ruginous ſtones are every where met with in abundance.
" On the Lena, here and there, are ſallies of argentiferous
" glantz galena, interſperſed in the chalk-ſtone, and at times
" appears in lumps of two or three pounds. It was firſt
" explored about fifty years ago by Meſſrs. Make and
" Kutuzof. They keep four machines at work at the ſaid
" copper-floetz, near the villages Botova and Shemanova.
" The ores are green-copper, blue-copper, brown-copper,
" copper-glas, fahlertz-ores, and malachquite. The gan-
" gues are calcareous and ſandy. The narrower the gangue,
" the richer it is. The proportion is one fourth to forty
" per cent. copper, but ſcarcely a trace of ſilver. On an
" average 100 pood of ore yields 4 pood of good copper."

high,

high, that they are covered with never-waſting ſnow. In that ſea or lake itſelf many lofty and ſteep cliffs aſcend above the waters as iſlands, ſome whereof conſiſt of ſolid white quartz. — The mountains are partly bare, but for the moſt part decked with foreſts. The moſt uſual kinds of trees are the pinus ſylveſtris and the birch; but here are likewiſe great numbers of larches and cedars. — The moſt conſiderable rivers which derive their ſtreams hence, are the Selenga, the Angara, the Lena, the Vilui, and the Tunguſa.

9. *The Nertſhinſkoi mountains.*

Theſe mountains, otherwiſe called the mountains of Dauria, extend from the Baikal and the ſources of the Selenga and the Amoor, down the two ſides of thoſe rivers; on one ſide as far as where the Argoon falls into the Amoor, and on the other ſide up to the heads of the Niuſa and the Oldekon, where it annexes itſelf to the ſpacious range of Okhotz, or Krebet Stanovoi. It conſequently includes the whole ſpace between the Selenga and the Argoon, take the ſame direction with the courſe of the Amoor and the Ingoda from weſt to north-eaſt, and comes down to us from the Mongoley, under the name of Yablonoi-Krebet, or apple-mountain.

tain. It has its greateſt elevations about the origin of the Amoor and Ingoda, where it conſiſts of very ragged granite tops, high and ſteep. Between the courſe of the Ingoda and the ſources of the Khilok and Vitim it is much ſmaller, notwithſtanding which, it ſeems to ſtand very high. It here forms a ridge, pretty uniform in its progreſs, woody, and well watered, and conſiſts for the moſt part of pure crumbled granite.

That part of this range incloſed by the Amoor and the Argoon, is properly called the Nertſhinſkoi chain of ore-mountains, (from the city of Nertſhinſk, ſtanding on the brook Nertſha, which falls into the Amoor,) is found to be the richeſt in minerals of any of the mountains hitherto explored in theſe regions. It produces beautiful kinds of granite, porphyry, jaſper, a great quantity of chalcedonies, carnelians, onyx, agate, hornſtone, large ſmoky topazes, aquamarine, hyacinth, and topaz-coloured ſchœrl, genuine topaz and beryl, &c. granites, fine feldſpar glandules, ſerpentine, aſbeſtus, nephrites, chalk-ſtone, ſlate, gypſum, excellent river-ſpar; ſalt-lakes, vitriol pyrites, alum-ore, native ſulphur, coals, warm ſprings; zink, iron, copper, and a remarkable quantity of lead-ore, containing

containing ſilver and gold, of which, ſince the commencement of this century a great many mines have been opened, and whereof ſeveral are ſtill in full work. Theſe regions preſent very numerous foreſts. The trees are pinus ſylveſtris, larch, birch, firs, cedars, &c. — The principal rivers here are, the Selenga, the Khilok, the Vitim, the Olekma, the Karenga, the Niuſa, the Oldekon, the Onon, the Ingoda, the Amoor, the Argoon, &c.

10. *The mountains of Okhotſk.*

This great chain, known under the name of Stanovoi-Krebet, borders upon the Nertſhinſkoi, or upon the Yablonoi-Krebet, near the region of the ſources of the Aldan and Oldekon, runs thence on one ſide northward on the Lena down to Yakutſk, and on the other ſide weſtward to the oudinſkoi gulf of the okhotſkoi ſea, which ſwarms with iſlands; proceeds round this to the upper Okhotſk, and ſtrikes out ſeveral branches in the parts between the Lena and the Indighirka, between this and the Kolyma, and between this and the Anadyr, where a part of the mountain runs out upon the tſhuſkoi promontory, while the other continues its courſe into the peninſula of Kamtſhatka.

All

All theſe extenſive mountainous regions are almoſt entirely unknown *. From the diſtrict of

* To this partition-range (1), ſays M. Pallas, between the ſources of the Vitim and the Nertſha, that mountain-ridge which runs between the barguſinian territory and the Kilok, as alſo the Yeravna-lake, ſtretches acroſs the ſource of the Vitim, of a great height, and much covered with foreſts, and is rich in all kinds of pyrites, poſſeſſes ſeveral warm baths, and runs away under the name of Stanovoi-Krebet, in an eaſtern direction, over the ſource of the Nertſha and the other ſtreams of the Shilka or Amoor, parting theſe and all the waters of the Amoor from the brooks of the Olekma. It ſhoots out a ſtrong ridge on the Olekma, which proceeds north-weſtward obliquely acroſs the Lena above Yakutſk, abruptly turns with one part on the ſhores of the eaſtern ocean, and proceeds with another branch over the ſources of the rivers Ouda, Aldan, Maia, and Yudoma, near upon the okhotſkian ſea, and diſperſes itſelf about the eaſtern entirely mountainous corner of Aſia, in ribs that run between the principal rivers. In this eaſternmoſt part of Siberia, the mountain is indeed extremely ragged and dreary, even the elevation of the country around is very conſiderable; but the granite mountain ſeems there to decreaſe, and we know of no exceedingly high ſnow-ſummits, though the whole region is cold and rude, producing nothing but arctic and alpine plants even in the plains, and even in ſummer faſt frozen marſhes and vales, as in the arctic deſerts, are no rarities there. About the Biela and Yudoma, in like manner as about the Ourak, this mountain has again an inconceivable quantity of red

(1) The Yablonoi-Krebet.

and

of Okhotſk has been brought jaſper, porphyry, and beautiful chalcedonies and carneoles, ſulphur-pyrites, native alum, agaricus aluminaris, mountain cryſtal, coals, &c. and there likewiſe are warm ſprings.

The mountain is for the moſt part not very abundant in woods. — Its principal rivers on the ruſſian or northern ſide, are: the Amga, the Aldan, the Uda, the Maia, the Yana, the Indighirka, the Kolyma, and the Anadyr.

11. *The mountains of Kamtſhatka and the Eaſtern Iſlands.*

The peninſula Kamtſhatka conſiſts of a rocky chain of mountains, which is bounded on the firm land by the penſhinſkian and anadyrſkian gulfs, and by the river Anadyr. On the ſouthern promontory the Kurilly iſlands are included in it, and towards the weſt it is connected with North America by the Aleutan iſlands. Either concerning the outward or inward mineralogical qualities of theſe inſular

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and green jaſper, of which whole chains are compoſed; whereas on the whole ſide of the ſiberian mountains, this ſpecies of ſubſtance, except perhaps here and there on the ſouth-ſide of the Yablonoi-Krebet, in Dauria, is no where to be perceived.

mountains,

mountains, we have but very little information*: we only know that there are ſome volcanoes in Kamtſhatka. — The moſt conſiderable ſtream on this peninſula is the river Kamtſhatka.

* Kamtſhatka is a chain of mountains, contiguous to the eaſtern end of this main ridge (1), forming one train with the whole ſuite with the very mountainous and rocky iſlands of Kurilly and Japan, which ſeem again to connect with the mountains which reach from Tybet through China. All theſe countries and iſlands ſeem to have ariſen, by ſubterraneous fires which ſtill continue to act, much more lately than Siberia. The eaſtern extremity of Aſia, as we know from the oppoſite north-weſt territory of America, is hilly throughout, and the ſhores for the moſt part broken off. All the newly-diſcovered iſlands betwixt theſe two quarters of the world are fragments and ſummits of mountains, of which thoſe lying neareſt to Kamtſhatka, keep the bearing towards the ſouth-eaſt, while thoſe off the coaſt of America proceed in the chain of the Fox-iſlands towards the north-eaſt, and even in theſe directions have their oblong form. Between the eaſtern extremity of Tſhutſkoi-noſs, and the weſtern point of North America, lie diſperſed other little iſlands, under the name of Andreanofſkie-oſtrova, but concerning which we have no diſtinct accounts. Pallas.

(1) The Stanovoi-Krebet.

Of

Of the principal Plains of Ruſſia.

Great and numerous as the mountainous tracts of the ruſſian empire are, yet the far greater part of it conſiſts of plains and flats, whereof ſome are extraordinarily extenſive. They are known here under the name of Steppes. I will briefly delineate the chief of them.

1. *The Steppe of Petſhora.*

This plain is bounded on the north by the Frozen ocean and the White-ſea; to the weſt by the Dvina; to the eaſt by the Petſhora; and to the ſouth by the Flœtz mountains, which, from the uralian chain ſtretch away weſtward acroſs the government of Vologda. It therefore properly lies between and on both ſides of theſe rivers. The ground is for the moſt part ſandy, very marſhy, thick ſtrewn with foreſts, and almoſt entirely uninhabited; the diſtricts about Archangel, Meſen, &c. excepted. The trees conſiſt principally in the pinus ſylveſtris, firs and birch, and on the elevations beautiful larches. This however is only to be underſtood of the ſouthern part; in the northern, by reaſon of the extreme cold, wood ſucceeds but badly. On this level are a great number of freſh, but

not

not very large lakes; and, beſides the rivers already mentioned, many others are to be met with, eſpecially if we conſider as a continuation of this great level, that plain which extends weſtward through the governments of Novgorod, Peterſburg, &c.

2. *The Steppe of the Dniepr.*

This comprehends the great plain which lies in the government of Ekatarinoſlaf, between the Dniepr and the Bogue; the krimean ſteppe on the left ſide of the Dniepr, and the whole ſpace which extends over the Donetz, away to the Don, and the ſea of Azof, and to the Euxine. This monſtrous plain which takes in the greateſt part of the governments of Ekatarinoſlaf, Taurida, and a part of Voronetz, Karkhof and Kief, is in general of a very dry and ſandy quality, with many ſalt-lakes and ſalt-plots, and is as yet but very little inhabited; here and there indeed is a wood with oaks and other foreſt-trees, but for the moſt part bare of timber, yet for the uſes of paſturage and agriculture it is not only not unfit, but in many diſtricts is perfectly well adapted to them.

3. *The Steppe of the Don and Volga.*

This compriſes the whole ſpace between the Don, the Volga, and the Kuban *. It is a very great, extremely arid ſteppe, entirely deſtitute of wood and water, has but few inhabitants, and contains ſeveral ſalt-lakes, and ſalt-plots †. It ſpreads through the greater part of the government of Caucaſus and into thoſe of Ekatarinoſlaf and Saratof, where, in its ſandy and calcaginous floetz-mounts ‡, it contains coals, ſulphur-pyrites, and warm-baths.

* Within theſe confines lies what is called the Kumanſteppe, which comprehends the whole ſpace from thence to where the Kuma flows out of the mountains, and reaches ſouthward to the banks of the Terek and the Caſpian ſea; northward to the other ſide of the Sarpa, and eaſtward as far as the Volga. In this ſteppe lie the ſalt-lakes of Aſtrakhan, ſome bitter lakes, warm ſources, &c. — The whole kumanian ſteppe, ſays Falk, has all the appearance of a dried-up ſea. It is a ſandy, part clayey and ſalt plain, without trees. But that it may have really been ſea-bottom, is highly probable, from the flat ſhores of the Caſpian and the ſea of Azof, from the ſhallowneſs of their coaſts, which is conſtantly gaining ground; from the equally low ſituation of the ſteppe, in which the Kuma, the Manitſh, &c. have ſcarcely any current, not to mention the general ſaltneſs that prevails, and the ſalt-places; from the ſaline lakes, and from the quantity of ſea-ſhells in the ſand of the ſteppe to be ſeen in every part of it, and from ſeveral other circumſtances.

† Solontſhi. ‡ Veiny or mineral-mountains.

4. *The*

4. *The Steppe of the Volga and Ural.*

This extenſive plain comprehends, between the rivers Volga and Ural, all that flat country which formerly went under the name of the Kalmyk-ſteppe; and, between the Ural and the Yemba, a part of the kirghiſtzi ſteppe lying within the ruſſian borders *. To the ſouth it makes the margin of the Caſpian ſea, and to the north it ſkirts the flœtz-mountains that run out from the Ural-chain. This, for the moſt part, ſandy, plain is greatly deficient in freſh water and wood; but is therefore the richer in rock-ſalts, and a multitude of ſalt-lakes that are

* It is termed the Kalmyk-ſteppe, becauſe it was left in poſſeſſion of a horde of that nation, and by whom it was inhabited till their flight in 1771. The Kalmyks call it Gahſen(1). Its weſtern part is denominated from the Volga, the ſouthern from the Caſpian, and the eaſtern from the Ural. It conſiſts of a far-ſtretching ridge of ſand-mountains, known under the name of Rynpeſki, but for the moſt part of a prodigious ſandy plain. The aforeſaid ſand-ridge (2), is ſaid to be between 50 and 150 verſts in breadth, according to admeaſurements in ſeveral places, and extends from Obſhtſhei-Syrt, or the Ural-mountain, through the middle of the ſteppe, quite to the Caſpian ſea. The ground conſiſts of ſand, marl, and clay, frequently mixed with ſea-ſhells, and every where bears the moſt evident marks of its having been formerly, as well as the kumane ſteppe, bottom of the ſea.

(1) The Deſert. (2) Called by the Kalmyks, Narym.

very productive. It contains a great number of diſtricts well adapted to the purpoſes of agriculture and the breeding of cattle, but is very poorly inhabited. One part of it lies in the caucaſian, and the other in the ouſimſkian government.

5. *The Steppe of the Irtiſh.*

Under this name I mean that great plain which extends between the Tobol and the Irtiſh, and between thoſe along the Alay and the Oby, as far as the influx of the Irtiſh into the Oby, compriſing an enormous territory. It is as it were over-ſtrewn with lakes of ſeveral kinds of ſalts, interſperſed among numerous foreſts of pines and firs and birch, in moſt places well calculated for paſturage and agriculture, but in proportion to their extent very thinly peopled. Between the Irtiſh and the Oby this plain incloſes alſo that fine well-watered level called the Barabinian-ſteppe, on which many conſiderable lakes are ſeen. The greateſt part of this whole ſteppe lies in the government of Tobolſk, but the other part in that of Kolhyvan *.

6. *The*

* Another part of this large plain, between the Iſchim and the Irtiſh, is called the iſchim-ſteppe, which particularly abounds

6. The Steppe of the Oby and Yeniſſey.

This includes the whole of that large tract beyond the Tſhulim (which falls into the Oby) between the Oby and the Yeniſſey, and extends to the ſhores of the Frozen-ocean. The beſt foreſts, however, are only found in the proximity of the mountain towards the ſouth. On the northern moſt margin of the Frozen ocean all the wood is low and ſtunted. The whole of this ſteppe lies in the government of Tobolſk.

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abounds in bitter lakes, but in all other reſpects reſembles the barabinian ſteppe, and in which, as well as in the former, a great many antient tombs are met with. — The barabinian or barabinſkoi ſteppe, and diminutively the Baraba, occupies the ſpace between the Irtyſh and the Oby, ſouthward of the mountain, northward to the farther ſide of the Tara, and beyond the river Tuy. This diffuſive region, in length from north to ſouth, exceeding 600 verſts, and full 400 in breadth from weſt to eaſt, is all a flat, ſcarcely interrupted by a ſingle hill, though containing many freſh-water lakes, with ſome of bitter, and a few of common ſalt. This plain is for the moſt part of a good black ſoil, having the face of it enlivened by a number of pleaſant foreſts of birch. All ſerving to ſhew, ſays Mr. Falk, that the Baraba muſt have been one general bed of waters, and ſince far more moraſſy and replete with lakes than it is at preſent. Even in the memory of man, according to the affirmation of the Barabinzes, the diminution of the lakes, and the exſiccation of the pools, reed-plots, and marſhes, has been very obſervable, as well as the acquiſitions thus made by the firm land.

7. The Steppe of the Yeniſſey and Lena.

This great tract of deſert is bounded by the Yeniſſey; the Tunguſka, and the Lena; reaches northward, like the former, to the Frozen-ocean, and partakes of the ſame nature and quality with it. One part lies in the government of Tobolſk, and the reſt in that of Irkutſk.

8. The Steppe of the Lena and Indighirka.

The ſame account may ſerve for the region, little known, which lies a vaſt extended plain along the ſhores of the Frozen-ocean, between the Lena and the Kolyma, to the two ſides of the Indighirka, and is wholly in the government of Irkutſk.

SECTION III.

WATERS.

Of the Seas forming the Boundaries of the Ruſſian Empire.

1. The Frozen or the Northern ocean.

THE Ruſſians called this ſea, in antient times, Morè Muremanſkoe, but at preſent Ledovitoë morè. By the Goths it was termed Gandawyk, by

by the Cimbrians Mare Maruſa, and by the Latins, Mare Sarmaticum, and Mare Scythicum. The Swedes call it Is-Hafoet, and the Norwegians Leberſee. It borders the whole of the northern part of the empire, from the confines of Lapland to the Tſchukotſkoy-Noſs; that is, from 50 to 205 deg. of longitude, and conſequently laves the ſhores of the governments of Archangel, Tobolſk, and Irkutſk. Several bays of very conſiderable expanſe are formed by this vaſt ocean. The greateſt is the bay in the vicinity of Archangel, which commonly goes under the name of the WHITE-SEA, extending from north to ſouth within the land, from 69 to 63 degrees of north lat. and contains a multitude of petty iſlands. — Next follows the Tcheſkaia guba, the karian bay, called alſo the karian ſea, Karſkoe morè; then the Obſkoe bay, which is uncommonly ſpacious; the Taymurſkaia guba, or bay; the Khatangſkaia guba; two bays at the mouth of the Lena; and, laſtly, the Tſhaunſkaia guba, at 185 deg. longit. — Of the numerous iſlands in this ocean the moſt conſiderable are: Novaya Zemlia and Kalgueva; but both of them are uninhabited and only frequented by fiſhermen and hunters. Novaya Zemlia is indeed well ſupplied with waters, but is rocky, unfruitful, and deſtitute of wood;

ſcarcely are a few ſtunted buſhes and polar plants to be met with there. But, on the other hand, this iſland abounds in rein-deer, white bears, white and blue foxes, and the ſhores ſwarm with morſhes or ſea-cows, &c. Its magnitude is eſtimated at 120 verſts in breadth, and 6000 verſts in circumference. On the northern ſide it is entirely encompaſſed with ice-mountains. Among the lakes there is one of ſalt water. From the middle of October till February the ſun is not viſible at all; but they have numerous and ſtrong north-lights. In ſummer there are no thunder-ſtorms. The ſnow falls in many places to the depth of four arſhines. For two months, namely June and July, the ſun never ſets. Between this iſland and the main land is the famous paſſage known by the name of Weigat's ſtraits. — Though this ſea contains ſo many bays, not leſs numerous are the capes or points of land that ſtrike out into it; theſe ſpits of land are called in ruſs Muiſs or Noſs; for ex. Muiſs-Matſol, Severo-Sapadnoi-Muiſs, Severo-Voſtotſchnoi-Muiſs, (or Taymurſkoi,) Muiſs-Svetoi-Preobrajenia, Svetoi-Muiſs, Shalatſkoi-Muiſs, and Tſchukotſkoy-Noſs. — In all this great ſea there are but three harbours whence at this time any navigation is purſued, namely, Kola, Archangel, and Meſen, whereof

whereof that of Archangel is the moſt famous. But that navigation, in compariſon of the prodigious expanſe of this ſea, is very trifling; however it is partly owing to the ſhort portion of the year allowed by the ice for this purpoſe; and in ſome regions there is ſcarcely time for undertaking it all. As for the northern paſſage to China, which, as every one knows, has been ſo often attempted, nothing has hitherto been diſcovered favourable to any hopes from future enterpriſes. — The ſhores in many places, eſpecially thoſe of the White-ſea, are beſet with rocks; in other parts low, with ſhoals that, in a manner, forbid acceſs, and the country adjacent very marſhy. — The water in this ſea is proportionably but little ſalt, though near Archangel it is ſo briny, that ſome quantities of common ſalt are prepared from it. The ebb and flow are moderate, and in the parts lying moſt to the north ſcarcely perceptible. — The fiſhery is very conſiderable, particularly of ſtock-fiſh, herrings, whales, morſhes*, porpoiſes, ſea-dogs, &c.

2. *The Eaſtern or the Pacific ocean.*

This ocean waſhes the ſhores of the government of Irkutſk, from Tſchukotſkoy-Noſs, or

* Hippopotamus.

Cook's

Cook's ſtraits, to the frontiers of China, in other words, from the mouth of the river Aimakan, that is, from about 65 to 55 deg. n. lat. This ocean is divided into two great parts. That lying eaſtwards from Kamtſhatka, between Siberia and America, is eminently ſtyled the Eaſtern, or the Pacific ocean: that on the weſt ſide from Kamtſhatka, between Siberia, the chineſe Mongolèy, and the Kurilly iſlands, is called the ſea of Okhotſk. Thus, from the different places it touches, it bears different denominations: for inſtance, from the place where the river Anadyr falls into it, it is called the ſea of Anadyr; about Kamtſhatka, it is called the ſea of Kamtſhatka; and the bay between the diſtricts of Okhotſk and Kamtſhatka is called the ſea of Okhotſk, the upper part of which is termed Penjinſkoye morè, that is, the Penjinſkian ſea, as it approaches the mouth of the river Penjina.

In this ocean are a multitude of iſlands, and the peninſula of Kamtſhatka; which, as in their proper place, I ſhall here enumerate.

1. The peninſula of KAMTSHATKA. It was firſt diſcovered by the Ruſſians in 1696, but not made totally tributary till 1711. Kamtſhatka lies between the 51ſt and 62d deg. of n. lat. and between the 173d and the 182d deg. of longitude. Its boundary towards the eaſt and ſouth is formed by the Eaſtern ocean; towards the

the weſt by the ſea of Okhotſk, and towards the north by the country of the Koriaki. — The country is full of mountains, among which are ſome volcanoes, whereof one is not far from Niſhnei Kamtſhatſkoi oſtrog, and another at a ſmall diſtance from Verchnei Kamtſhatſkoi oſtrog. The former is the biggeſt. In the year 1762, it firſt announced its approaching eruption, by a ſubterraneous noiſe, and ſoon after began to ſpout with flames on different ſides. To this burſt of fire immediately ſucceeded a large ſtream of melted ſnow, flowing down to the neighbouring valley with ſuch rapidity that it carried away two Kamtſhadales who were out in queſt of game. The aſhes and other ſubſtances thrown up were ſcattered round about to the diſtance of three hundred verſts. In the year 1767 another eruption happened, but by no means ſo violent. On that evening ſtreaks of fire were remarked to iſſue from the mountain. The irruption that happened immediately after cauſed conſiderable damage to the inhabitants. Since that time no flames have been obſerved to proceed from it; but both the mountains ſmoke continually. — Near the village Mſtkova a merchant of Irkutſk in 1760 diſcovered iron-ore, and erected ſmelting-houſes on the ſpot. Silver-ore, though not very rich, is alſo

ſaid

ſaid to have been found in Kamtſhatka. Moreover, the country, in ſome places, bears birch-trees, poplars, alders, willows, ſhrubs, and wild fruits of various kinds; white cabbage, turnips, ſmall radiſhes, red and yellow turnips, cucumbers, &c. In the arts of agriculture they have made no great progreſs; not that they have been wanting in attempts on their part, for even previous to the year 1765 ſeveral improvements were viſible in their practice. The corn, from its early maturity, is almoſt always damaged. Perceiving that the inhabitants were not averſe to the labours of huſbandry, the late commandant of Kamtſhatka, major von Behm, exerted himſelf greatly in bringing agriculture and grazing into repute, by encouragements of various kinds, and he had the ſatisfaction to ſee that his generous pains were not beſtowed in vain. His worthy ſucceſſor too, Mr. aſſeſſor Reinikin, continued theſe laudable endeavours, with ſuch good effects, that in 1782, from 68 pood and a half of winter-rye, 3416 ſheaves, and from 594 pood of barley, 24,840 ſheaves, were reaped. Oats, wheat and buck-wheat, are much ſpoiled in general by the early froſts; but hemp ſucceeds very well. With agriculture, the breed of european domeſtic animals has likewiſe been introduced; and even with potatoes

toes a very ſucceſsful beginning has been made.

2. BERING'S ISLAND. This iſland, which was diſcovered in 1740, lies in n. lat. from 55 to 56. It is 165 verſts in length, and of various breadths; the greateſt breadth however is 23 verſts. This iſland conſiſts of a range of bald cliffs and hills in continuity with each other, which, being only divided by a great number of vallies, lying north and ſouth, ſeem to riſe from the ſea like one ſingle rock. The higheſt of theſe mountains, however, are, perpendicularly, not above a thouſand fathoms in height, are covered with a yellow clay, and are very much riven by ſtorms and weather. The vallies are extremely narrow. All the mountains conſiſt of granite, except the rows that ſtand neareſt the ſea, which commonly are of ſandſtone, and, not unfrequently, form ſtony walls exceedingly ſteep. In theſe mountains there are likewiſe many caverns *. In the year 1741, three pretty ſmart ſhocks of earthquakes were perceived. The ſea hereabouts is not covered with ice. The cold is in general moderate; notwithſtanding which there are mountains whereon the ſnow never diſſolves. Neither thunder

* Hence it ſhould appear that there may be chalk-mountains.

nor

nor the aurora borealis have ever been obſerved here. The iſland has ſprings of excellent water, and beautiful cataracts. Of animals there are only ice-foxes, ſeals, ſea-bears, ſea-lions, ſea-cows, &c. No wood at all grows here; but ſeveral kinds of plants are ſeen. The iſland is uninhabited.

3. The COPPER ISLAND. This iſland, which was firſt viſited in 1755, by Yakovlief, a maſter-ſmelter, lies eaſt-ſouth-eaſt from the mouth of the river Kamtſhatka, in 55 deg. n. lat. and extends from north-weſt to ſouth-eaſt, very narrow and long, to 55 verſts in length. On the northern ſide its ſhores are for the moſt part bold and rocky, interchangeably with conſiderable bays; but on the ſouth ſide they are more gentle, and in part ſandy. Only towards the ſouth-eaſt cape the coaſt is fronted by huge overhanging rocks and ſhoals, which at ebb-tide form a level with the ſhore. The whole iſland is perfectly deſtitute of wood, and very mountainous. The mountains are very lofty, and conſiſt of a brittle ſtony ſtratum, which frequently tumbles down in very large maſſes. In the north-weſtern promontory native copper is found, (from which circumſtance the iſland receives its name,) where, in a ſteep declivity of the mountain, two openings riſe near the ſurface,

face, ſcarce twenty fathoms aſunder, and about as far from the point or promontory, which lead to a ſchiſtus gangart, mixed with quartz and crumby ſpar, bearing a calcareous earth transfuſed with verdigris, from which native copper and copper-glaſs are got. Cloſe to this, on the ſtrand, left by the water at ebb, little bits of copper about the ſize of a bean, thrown up by the ſea, are gathered. On the ſouth ſide of the point of the mountain-reef, at the diſtance of ſome fathoms from the point, on a flat ſhore, were found three cliffs at various diſtances, partly below the high-water mark, whence more than half a hundred weight of native copper, in all kinds of bits, exfoliations, and maſſes were obtained; and ſtill a fourth place preſented itſelf on that ſide, ſeveral fathoms from the point of land, right in the ſea, where, in a ſpace 46 feet long and 6 feet broad, ſeveral little cliffs with native copper and copper-glaſs expoſed themſelves to light. The largeſt piece of this native copper is to be ſeen in the cabinet of natural hiſtory in the imperial academy of ſciences at St. Peterſburg, weighing upwards of ten pounds.

4. The KURILSKOY iſlands. Under this name are compriſed all thoſe great and little iſlands which lie concatenated in the eaſtern ocean, from

from the foreland of the peninſula of Kamtſhatka, or the kurilloy Lopatka, as it is called, between ſouth and weſt, to the japan iſland Matmai; ſome whereof are inhabited and wooded, others quite bare and rocky, and a few that are volcanic. The ſea-room occupied by them, taking it from the kurilſkaia Lopatka to the iſle Matmai, may be eſtimated at thirteen hundred verſts. Of the two Kurilly iſlands that lie neareſt the Lopatka, the firſt accounts were brought to Ruſſia in the year 1713. The others have been ſucceſſively known from that period to 1779, by means of ruſſian mariners, who, at the time, put them under contribution to the crown. At preſent, we reckon them to be in all one-and-twenty in number; namely, 1. Shoumtſhu, the neareſt to Kamtſhatka. The channel between the Lopatka and this iſland is 15 verſts over. — The length of the iſland, from north-eaſt to ſouth-weſt, is 50, and the breadth 30 verſts. The land is low, with moderate ridges of hills. The eaſtern coaſts, about the middle of the iſland, form ſteep ſhores and rocky ſhelves, and are for ſome way into the ſea ſtudded with rocks. Here is ore; and it is ſaid that a vein of ſilver has been formerly worked. In the centre of the iſland is a lake, 5 verſts in circuit, and flows by a ſtreamlet into the ſea. In this are caught fine

ſalmon, and ſeveral other kinds of fiſh. There are no ſtandard trees upon the iſland, only buſhes of alder, willow, and an eſpalier kind of pine, or ſiberian cedar, on which grow little cedar-nuts. The inhabitants are not genuine Kurils, but of kamtſhadale deſcent; of theſe 44 perſons pay tribute. — 2. Poromuſhir; between which and the former iſland the ſtraight is but 2 verſts broad. It lies from north-eaſt to ſouth-weſt, and is twice as large as Shoumtſhu, very hilly, richly furniſhed with lakes and minerals, but deſtitute of wood. Here is no ſcarcity of red foxes, wolves, and all kinds of mice. — 3. Shirinki. The diſtance from Poromuſhir to this third iſland may be about 26 verſts. On it riſes a round mountain-top, and about it on the coaſt walls of rock and looſe brittle ſtone, but no ſandy bay, nor any ſafe inlet for ſhipping. The iſland is nearly as broad as it is long, and may be about 40 verſts in circumference. It is only inhabited by ſea-lions and other marine animals, with ſome red foxes and ſea-fowl that have been carried thither with the ice. Except a few ſticks of the mountain-pine and ſome alder-buſhes, there is no wood on the iſland; and as to water, there is neither a ſtream nor a ſpring. The rocks are very much diſpoſed to break, and fall in fragments. — 4. Makan Kur

Aſſey, lies at the diſtance of 60 verſts from the foregoing; in length it is 20 verſts, and in breadth 10. It is ſcattered with rocks, eſpecially about the ſhores, and many meadow-grounds, and moiſt plains. It has no ſtanding wood, but ſuch ſhrubs as in the laſt-mentioned iſland. Red foxes here are a few, and ſea-beavers and ſeals lie about the ſhores of this uninhabited iſland, which has neither lake nor ſtream, but plenty of ſprings on all ſides. — 5. Anakutan; the diſtance hither from the fourth iſland is 35 verſts. It is about 100 verſts long and 15 broad. Three ſummits of mountains here diſtinguiſh themſelves by their elevation, two of which have exhauſted craters. The wood is here likewiſe ſcrubbed and ſcanty. Red foxes are pretty numerous; but few ſea-beavers, &c. on the coaſt. Several ſtreams of hard water flow from it into the ſea. — 6. Ar-Amakutan; the diſtance of this iſland is no more than 6 verſts from the laſt-mentioned. It is in length 20, and in breadth 10 verſts. In the centre of the iſland ſtands a rocky mountain, which was formerly a volcano; and towards the ſtraight between it and the fifth iſland, on the eaſtern ſhore, ſtands another, which is alſo reported to have been once a burning mountain, the foot and ſummit whereof are covered with white

ſand.

ſand. This iſland is alſo uninhabited, and is only viſited by the Kurils on account of the chace; as it abounds with foxes, and on the ſhores are ſea-lions and ſea-otters. In the ſteep declivity of the coaſt is found waſſerbley, or molybdæna, in a white ſtratum. — 7. Syaſkutan; from the ſixth iſland hither it may be 50 verſts; the current in the ſtraight between them is very rapid. This iſland is alſo uninhabited. It is 80 verſts long and 5 broad. Upon it are two high rocky mountains. One of them ſtands in the northern half, on the north-eaſt ſhore, extends ridge-wiſe, and has formerly burnt; round about are rocky hills and a coaſt of cliffs. The other huge rock is on the promontory near the north-weſt ſide, and, from the pinnacle to the ſea ſhore, on both ſides, conſiſts of nothing but rock and crumbling ſtone. — 8. Ikarma; this is about 12 verſts from the ſeventh iſland, and is 8 verſts long. Upon it is a volcano, which at times emits flames. The ſhore is in general ſtony, here and there preſenting a ſulphureous ſpring. Lakes and ſtreams here are none; and, in regard to wood and animals, the deſcription of the foregoing iſland may ſerve as well for this. — 9. Tſhirinkutan; to this from the eighth iſland is computed at 30 verſts. The iſle is round, and has 15 verſts in diameter. A mountain

near upon the ſtrand is continually iſſuing ſmoke, and very frequently lets large ſtones roll down one of its ſides, whereby a valley has been excavated from top to bottom. The coaſt round about is mountainous and rocky. This iſland has great numbers of wild fowl, but in other reſpects is like the former. — 10. Muſſyr; from the ninth, this round and ſtony iſland lies at the diſtance of 35 verſts, the diameter whereof cannot be more than 3 verſts. It is deſtitute of water, but is notwithſtanding frequented by great quantities of birds. Here are alſo ſea-lions in abundance. — 11. Rach koke; the diſtance from the tenth iſland to this is ſtated to be 120 verſts. The length and breadth of it may each amount to about 20 verſts, and it looks like a ſolitary mountain puſhing upwards from the ſea. Formerly it had verdure upon it, with ſhelves of rock, where the ſea-fowl made their neſts in great numbers. But theſe rocky ſhelves have been demoliſhed by the eruption of ſubterraneous fires, which ſplit the ſummit of the mountain, throwing up vaſt quantities of ſtones and aſhes, and ſince that time the iſland has always continued burning. At this eruption thoſe places on the ſhores where formerly they had 13 fathom water, were filled up with rubbiſh and aſhes into ſhoals and banks. — 12. Mutova; be-

tween this and the eleventh iſland the diſtance amounts to 45 verſts. It may be about 30 verſts long, and nearly the ſame number in breadth. On the ſouth ſide ſtands a very lofty mountain, from whoſe ſummit a thick black ſmoke is conſtantly riſing, and which at times caſts up red-hot ſtones, ſpreading danger and deſolation around it. To the north, vallies rich in herbs and habitable plains extend, where various kinds of edible roots and wild fruits grow as in the forementioned iſlands. Foxes are the only land-animals here. Perſons ſubject to the tribute are here numbered at 63. — 13. Raſſagu; this iſland lies 40 verſts diſtant from the twelfth, and is about 30 verſts meaſured either way. It has lofty mountains and ſteep rocky ſhores, with very few ſandy bays. On the mountains, here and there, is a good foreſt of birch, alders, and the nut-bearing pine; the vales and flats abound in herbs. On the land is no other animal than the fox, but the cliffs of the rocks afford neſting-places for all kinds of ſea-birds, and the beavers and ſeals lie ſcattered on ſeveral parts of the ſtrand. Here are no ſtreams that yield fiſh. The Kurils on this iſland are not numerous, and part of them are baptized. — 14. Uſſaſſyr, lies 17 verſts from it, and may be in length and breadth about 25 verſts each. It is properly two iſlands

lying close together, consisting of considerable rocks and cliffs. Opening to the south is a round bay, in the shape of a kettle encompassed with hills, where the strand is sandy; and along it, as well as on the sea-shore, runs a source of almost hot water, and not far from it another. Here too are some spouts, running strong, and throwing the water to a considerable height in the air. In many places we perceive chaps and chasms in the earth of a hundred fathom in length, and sometimes more. Near the great spout the shore is steep and high, producing large lumps of sulphur and salmiak, which partly fall down, and partly are collected there. Otherwise the island is in quality like the former. — 15. Ketoi, lies 36 versts from the fourteenth island, and is 30 versts in length, with about 10 in breadth. On this island are seen high mountains, with their white rocky-walls and summits; at the foot of these and in the vallies are forests of birch, alders, the sorbus sylvestris aucuparia, the pinus cembra, the pinus montana, and another species which is probably a taxus. The island nourishes white, black-bellied, and red foxes. The sea-animals do not lie in great plenty. The island is uninhabited. — 16. Semussyr; here we may reckon 30 versts from the fifteenth island. The length of this is 130 versts.

verſts, and the breadth not more than 10. This iſland has four mountains, one of which ſhews evident traces of its having formerly burnt; elſe it is of the ſame properties with the laſt-mentioned. The paſſage hence to the ſeventeenth iſland is 200 verſts. — 17. Tſhirpo Oi, with two adjacent iſlands; both in length and breadth it may be eſtimated at 15 verſts. This iſland has had a volcano, that has vomited ſtones over the whole face of it. In lieu of all foreſt-woods, nothing is here to be ſeen, except buſhes of the above-mentioned ſorbus ſylveſtris, and no ſtreams, but one little ſaline lake. In one ſpot is a ſalt-ſpring of that kind called acidulæ, the water whereof loſes its acidity by boiling. On an adjacent iſland is alſo a volcano. — 18. Ourup, diſtant from the foregoing 25 verſts. This iſland is of a more reſpectable ſize than moſt of the others, being 200 verſts long, and 20 broad. It has high mountains with bald heads, very ſteep, and about them deep glens. On the north coaſt lie four ſmall iſles almoſt contiguous. In the vales, and beſide the ſtreams, ſometimes is ſeen a plain; and as well in the vallies as on the mountains, as likewiſe over the whole iſland on the north and eaſt ſides, grow good high foreſts of birches, alders, the ſorbus ſylveſtris, and ſturdy willows. On the ſhores and in the valley-

plains the herbs ſhoot uncommonly high. Streams of conſiderable ſize fall from the mountains into the ſea, and yield a variety of fiſh. In the northern part, about the middle of the iſland, is an inland ſea, which ſends its waters, by a broad ſtream, into the ocean. The ſtream abounds in fiſh. There are great quantities of rats on this iſland, and red and white foxes in plenty. Where the mountains are broken into ruins, appear various clefts producing ore, ſuch as copper-pyrites mixed with quartz, ſulphur-pyrites as hard as ſteel, with quartz, and a poor copper-pyrites in a calcareous gangue. This iſland is only frequented for taking the foxes. — 19. Etorpu; it lies 30 verſts from the foregoing, and is either way, about 300 verſts. Lofty mountains with numerous ſummits are diffuſed over the whole iſland; one of them, at the northern extremity, emits a continual ſmoke from its top, and, at intervals, flames. The ſummits of the mountains are bald, with ſteep cliffs and heaps of rubbiſh. Here are ſtrong foreſts conſiſting of the ſame trees with the laſt-mentioned iſland. In the ſouthern half, near about the centre of the iſland, grow larch-trees, in the proximity of the ſea, but ſlender, though farther inland, in the plains of the vallies, good timber-trees, fit for the purpoſes of building. Here are likewiſe black bears, and in

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the foreſts ſables and foxes are met with. Of rats there is no ſcarcity; fiſh-otters haunt the ſtreams; the brooks abound in fiſh. During the ſtorms that happen here, whales and large dolphins are thrown aſhore by the ſea. The ſea-otter is not ſeen here, but ſea-lions, though not of any great dimenſions. The inhabitants are hairy Kurils, who dwell together in villages. They are numbered to the capitation tax at 92 perſons. — 20. Kunaſſyr; from the former iſland to this are about 40 verſts. It is 150 verſts long and 50 broad, and is entirely ſurrounded by mountains with lofty ſummits; but on the middle of the iſlands are low plains. Firs, larches, birch, &c. grow here. At the ſouthern extremity, a flat ſandy beach extends from the mountains, where the ſea brings up a ſpecies of pearl-bearing muſſel in vaſt abundance; ſome of the bigneſs of a deſſert-plate. The iſland has lakes and broad ſtreams that abound in fiſh. It is likewiſe inhabited by Kurils, who are rated at 41 perſons. — 21. Tſhikota; diſtant from the former iſland 70 verſts. It is in length 120, and in breadth 40 verſts. It has lofty mountains, with ſimilar foreſts to thoſe of the twentieth, with lakes and ſtreams of wholeſome water. The inhabitants are alſo Kurils. At the ſouthern extremity lie ten petty iſles. — The two-and-twentieth

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is the iſland Matmai, the largeſt of all, and the neareſt to Japan, whence it is diſtant but 25 verſts. Its ſize and extent are not at preſent known. The channel between this iſland and Japan is ſaid to be no more than 60 verſts over, and full of rocks. The current here is extremely rapid. On the ſouthern promontory ſtands the japaneſe town Matmai, where the ſupreme commander has his reſidence. The hairy Kurils are in poſſeſſion of the inland parts of the iſland. The Japaneſe and Chineſe reſort hither in trading-veſſels for the purpoſes of commerce, which conſiſts of taking in barter of the Kurils, ſea-otters, ſeals, and various ſorts of furs, alſo fat, oil, and blubber of whales and other marine animals, eagles' feathers for fledging their darts and arrows, and other articles, which they get very cheap in exchange for ſilk and cotton pieces for garments, japanned veſſels, rice, brandy, tobacco, ſabres, knives, pots, and kettles, hatchets, and the like. In the regions of the bay Atkis, the land extends northward in a great headland, where lofty mountains riſe in all parts, tending eaſtward in ridges. Within land are ſpacious vales between the mountains, and ample rivers roll in currents to the ſea. The coaſt abounds in bays and bites, which might be made to ſerve as harbours. The foreſts conſiſt of oaks, beech, elm,

elm, red-wood of an unknown ſpecies, birch, willows, and other trees never ſeen to grow in Ruſſia. On the mountains are a large kind of nut in great abundance. The fields produce a multitude of unknown herbs and vegetables; yet among them are perceived ſtrawberries, ſerviceberries, cranberries, bilberries, and a large kind of hips and haws. Of animals, the foreſts afford haunts to black bears, elks, roebucks, deer (which the Kurils hunt with clubs), ſables, foxes, hares, and river-otters. The bays and inland lakes ſwarm with all kinds of ducks and other water-fowl; nor is the country deficient in frogs and ſnakes. — Of theſe two-and-twenty kurilli iſlands, only the former twenty-one are ſubject to Ruſſia; but all of theſe do not pay tribute.

5. The ALEUTSKY iſlands. Under this general appellation are comprehended that chain of iſlands which extends from Kamtſhatka, beyond the Copper-iſland, north-eaſtward to the continent of America, whereof the moſt conſiderable amount to forty in number. We may clearly admit this chain of iſlands to be a branch of the kamtſhadale mountains continued in the ſea. A part of it was firſt ſeen ſoon after the diſcovery of Behring's iſland, the reſt at ſeveral periods ſince. South-eaſtward of the Copper-iſland, within

within 150 or 200 verſts between the 54th and 55th deg. of n. lat. lie three ſmall iſlands known by the names of Attak, Shemya, and Semitſhi, and, with a few others, were firſt denominated by the Ruſſians Aleutſkie oſtrova, becauſe a bald rock, in the language of theſe parts, is called aleut. In the ſequel this name was extended to the whole chain; though a part of it, namely as far as the iſland Yamblak, are named the Andreanofſkoi, and the reſt, lying farther towards America, the Fox iſlands. — Of the above-mentioned three little iſlands, Attak is the biggeſt, ſeems to have a larger extent of ſurface than Behring's iſland, and has an oblong form, lying more weſt and eaſt. No volcanic traces have been diſcovered, and here are no land-animals but ice-foxes and rock-foxes, more frequently blue than white. The ſea-otters come hither but ſingly; whereas ſea-lions, ſea-bears, manatis, and other ſea-animals frequent theſe ſhores in herds. — That row of iſlands comprehended under the name of Andreanofſkiye oſtrova, runs ſouth-eaſtward from the extremeſt of thoſe properly called the Aleutan iſlands, continuing the chain as far as the Fox iſlands, between eaſt by north and eaſt-north-eaſt, within the 52d and 54th deg. of n. lat. The ſouthern and neareſt are inconſiderable iſlands, and but little known.

More

More remarkable are: Takavangha, which has in its centre, near the northern coaſt, a burning mountain; Kanaghi, likewiſe with a high ſmoking mountain; Ayag, which has a number of good bays and anchoring-places; and Tſhetchina, on which a high white mountain over-tops the reſt, which apparently is an extinct volcano, as there are ſtill hot ſprings on this iſland. — The late Mr. Muller arranged the iſlands between Kamtſhatka and America, in the following manner: Under the general name Saſignes are ſix iſlands, viz. Behring's and Copper iſlands, and the neareſt Aleutans, whereof Otma, Samia, and Anatto, are moſt eminent. The ſecond diviſion is called Chao, and comprehends eight iſlands: Immæk, Kiſka, Tſhetghina, Ava, Chavia, Tſhagulak, Ulagabma, and Amtſhigda, or the more diſtant Aleutans. The third claſs bears the name of Negho, and contains what are called the Andreanofſkiye iſlands, that is the ſixteen following: Amatkineg, Ulek, Unalga, Navotſha, Uliga, Anægin, Chagulak, Illaſhe, Takavanga, Kanaga, (which two are remarkable for burning-mountains,) Lek, Shetſhuna, Tagaluhn, behind which follow ſome uninhabited little rocks and iſlands, one of which, on account of its black cliffs, is called by the Ruſſians, Goreloi *, and, laſtly,

* The burnt.

Atſhak

Atſhak and Amlak. The fourth claſs are the Fox iſlands, under the name Kavalang, the number whereof is ſaid to be ſixteen, as: Amukta, Tſhigama, Tſhegula, Uniſka, Ulaga, Tanagulæna, Kagamin, Kigalga, Shelmaga, Unmak, Agun-Alæſka*, Unimga, or Unimak, towards which a point of land from the continent of America, with a few circumjacent iſlands, is ſaid to project; and then, ſtill beyond this point, are Uligan, Antun-Duſſume, Semedit, and Senegak, whence perhaps Kadiak was formed. The Andreanofſkiye and Fox iſlands are in general juſt as mountainous as the Aleutan and Behring's iſland. Their coaſts are rocky and ſurrounded by breakers. The land riſes immediately from the coaſts, to ſteep, bald, rock-mountains, gradually aſcending higher behind each other, and take the appearance of chains of mountains, with a direction lengthwiſe of the iſland, and commonly in the midway of the breadth the higheſt ridges are formed. Springs take their riſe at the foot of the mountain, and flow either in broad and rapid ſtreams, into the neighbouring ſea; or, collecting themſelves in the rocky vales and glens, form ample lakes, which let off their ſuperfluous waters by natural

* Or, Unalaſhka.

canals,

canals, into the adjacent bays. Several of these islands, where at present no smoking volcano is any longer discernible, as Ayak and Tshetchina, seem antiently to have had them, as their traces are still to be seen in the sulphureous boiling sources that are met with at various intervals. On Tatavanga and Kanaga, among the Andreanofskiye islands, and again on Umnak, on the great island Unalashka, and on Unimga, among the Fox islands, are still active volcanoes, which continually emit smoke, and from some of them frequently issue flames. Only the smoking-mountain of Unalashka has never been seen to vomit fire. Any traces of metals have never yet been descried on these volcanic islands. But carneoles and sardonyxes are brought from them. The soil of these islands is reported to be similar to that of Kamtshatka; the same kinds of edible wild berries and roots have been found there, excepting some few vegetables which seem to be of foreign produce. Besides creeping twigs of willow, larches, alders, and birch, which seem as little as on the snow-mountains, no wood has been perceived on these islands, Kadiak excepted. It is said, however, that on Unalashka, in some deep vales, a small matter of wood shoots up. But the sea wafts all sorts of floating-timber to their shores. Of land-animals, on the Fox

islands

iſlands (though not on the Andreanofſkiye) they have an extraordinary number of foxes. Among which there are about as many black and grey, as red and brown. Here are alſo bears, wolves, river-otters, river-beavers, martins, and ermines, which are however in inferior quantity, and ſeem to be come over from America. The ſea-otter is frequently caught here. Their ſeas abound in all ſorts of ſeals, dolphins, and whales; ſea-lions and porpoiſes are rare, and ſea-cows not at all to be ſeen. The water-fowl and fiſh are the ſame as at Kamtſhatka. The winter is tolerably mild, but the ſummer equally ſhort and unpleaſant. Theſe iſlands are pretty well peopled; the inhabitants moſtly pay tribute to Ruſſia, and drive a bartering trade with the ruſſian mariners who go thither on account of the very profitable chace of ſea-otters and foxes. They are, however, not always to be truſted, as no ſmall number of Ruſſians have experienced to their coſt, having been robbed and murdered by theſe ſavages. — Of the inhabitants of Unalaſhka, their clothing, food, &c. an account is given in the voyages of Capt. Cook.

The moſt noted harbours in theſe ſeas are that of Peter and Paul, (or Avatſha,) on Kamtſhatka, and the port of Okhotſk. In the former engliſh veſſels have at various times landed; and

from

from both ſeveral ruſſian ſhips, for the purpoſes of the chace and the taking of ſea-animals, to the iſlands in the ocean. Ebbs and floods, and particularly the currents, are very ſtrong. The ſea-water is uncommonly ſalt. But this prodigious ocean is in general by far too little known at preſent for a particular deſcription of it.

Kamtſhatka (ſays Mr. Kirwan, in his ingenious eſtimate of the temperature of different latitudes) is ſo diſtant from the Atlantic, that its temperature is no way influenced by it, but rather by that of the north Pacific to which it adjoins. On the eaſtern coaſt, lat. 55, Captain Cook found ſnow 6 or 8 feet deep in May, and it continued till June; in May the thermometer was moſtly at 32°, and on the 15th of June not higher than 58°; in Auguſt its greateſt height was 65°, and its loweſt 40°; in October the hills began to be covered with ſnow; in November, December, and January, there are violent ſtorms, accompanied with ſnow, the wind at E. and S. E. In January the cold is ſometimes 28°, but generally 8°.

The northern parts of this peninſula enjoy the moſt moderate weather, being chiefly influenced by the north ſea, whoſe temperature, I believe even in winter, is milder than that of the

ſea below the ſtreights that ſeparate Aſia from America.

Speaking of the temperature of the north Pacific ocean, the ſame judicious and accurate author obſerves, that this part of it is contracted in lat. 66° to the narrow ſpace of 40 miles; and in lat. 52° it occupies the ſpace of only 30° in breadth, from eaſt to weſt, that is, about 1300 miles; whereas the Atlantic in lat. 52° is about 1700 miles in breadth, and is nowhere contracted to a leſs ſpace than 700 miles. Add to this, that the coaſts of Aſia on the one ſide, and thoſe of America on the other, are bordered with high mountains covered with ſnow for a great part of the year; and numerous high iſlands lie ſcattered between both continents. From theſe circumſtances we have ſufficient reaſon to conclude a priori, that this ſea ſhould be much colder than that portion of the Atlantic contained between the ſame parallels; for, during the winter, the mountains that line the coaſts, are cooled to a much greater degree, than the flat coaſts of the Atlantic; and the ſea, where narrow is entirely frozen; in ſummer, heaps of ice, being long ſheltered from the ſun by the iſlands, are carried down into lower latitudes, and the ſnow remains long unmelted on

the

the mountains; ſo that he is inclined to think, that the annual temperature of it is at leaſt 4 degrees below that of the ſtandard in each correſponding latitude. But the obſervations either on theſe ſeas, or the neighbouring coaſts, are not as yet ſufficiently numerous, to determine, with any preciſion, the mean temperature of any of theſe parts.

3. The EUXINE, or BLACK-SEA. This laves the ſhores of Taurida and a part of the governments of Caucaſus and Ekatarinoſlaf. It is divided into the Euxine proper, the Pontus Euxinus, computed to be 1000 verſts in length, and 500 in breadth; and the ſea of Azof, the Palus Meotides of the antients, which (not including the bay of Taganrok) is ſtated to be 200 verſts long and 160 verſts broad. Both theſe are now entirely within the confines of the ruſſian empire. The moſt important of the bays they form, are: 1. The Liman at the mouth of the Dniepr. 2. The bay near Perekop; and 3. that cloſe to Yenicaly. Theſe ſeas have but few iſlands in the vicinity of the ruſſian coaſts; the moſt conſiderable of them is Taman. — The principal harbours here are: Kaffa *, Sebaſtopol, Koſlof, Balaklava, and ſome others. At the

* Now Theodoſia.

weſtern extremity of theſe ſeas, within the province of Taurida, is a very large pool, called Sivaſh, or the Putrid ſea, which is about 140 verſts long and 14 broad.

4. The BALTIC, or EAST SEA, antiently called Variatzkoie morè, or the ſea of Variaghi, lies weſtward of Ruſſia *. That part of it which waſhes the coaſts of the governments of St. Peterſburg, Reval and Viborg is called the Gulf of Finland, which is about 400 verſts long, and 100 broad; and the part extending between the government of Riga and the iſland Œſel, is called the Bay of Riga. The chief harbours in this ſea are: 1. Riga (or Dunamunde). 2. Reval. 3. Pernau. 4. Habſal. 5. Rogervik, now called Baltic port. 6. Peterſburg (or Cronſtadt). 7. Viborg. 8. Frederickſhamm, and 9. Arenſburg, on the iſle of Œſel. The principal iſlands in this ſea, belonging to Ruſſia, are: Dago, Œſel, Cronſtadt, Hochland, Tyterſaari, Lavanſaari, Peniſaari, and Seitſaari. There are great fiſheries in theſe parts, and numbers of ſeals are taken; but far more conſiderable is the navigation: as it may be computed that

* Ptolomy calls this ſea Venedicus ſinus; Tacitus, Mare Suevicum; and Pliny ſpeaks of it under the name of Codanus ſinus. The Ruſſians call it Baltiſkoe morè; and the Swedes, Oſter-Sjon.

every

every year upwards of 2000 ſhips of burden paſs to and from the ruſſian ports alone. Much ſkill and caution are requiſite for navigating this ſea, and eſpecially the gulf of Finland, both on account of the heavy gales of wind ſo frequent here, and the multitude of rocks and ſhelves with which theſe ſeas abound. The water is but moderately ſalt, and has a very perceptible current, ſo that in northernly winds it is almoſt freſh to the taſte. It is affirmed, on very good foundation, that the water of the Baltic is continually decreaſing *.

I ſhall conclude this head with a ſhort deſcription of the above-mentioned iſlands, and a ſomewhat more circumſtantial account of Cronſtadt, which, as it is properly the port of St. Peterſburg, and the centre of its foreign commerce, ſeems to demand particular notice.

DAGO or DAGEN, and ŒSEL are two conſiderable but rocky iſlands. On the latter are nevertheleſs many beautiful flowers. Conſiderable quantities of limeſtone and marble are brought away from it †.

* According to repeated obſervations made in Sweden, the Baltic is found to ſubſide at the rate of 45 inches every 100 years.

† See Hup. i. 315. iii. 407. Haigold, ii. 363.

Œsel, commonly called in esthnic, Kurre saar, i. e. Crane island, but by the inhabitants Sare ma, i. e. The island. A literary gentleman of the place supposes the former name may primarily have been used to express the Kures island: for, as the Kures, especially those on the coast, by the testimony of history, frequently made common cause with the Œselans, the Livonians on the main land might answer the interrogatories of the Germans on their arrival: Œsel is the island of the Kures, Kurè or Kura-saar; whence afterwards Kurresaar might probably arise. The Lettish called this island Sahmu semme; on which a sagacious critic remarked, that this name likewise may have undergone a gradual change, and at first was Sahna semme, i. e. Side-land. — The length of the island is, from the little strait to Arensburg, 8 swedish miles, or 10 russian verst; and thence to the extremity of the cape that points towards Courland, 6 swedish miles, or 7½ russian verst; consequently, according to the old swedish admeasurement 14, but by the recent russian 17½. The breadth is in some parts 6, in others 8, and in others again 11 verst; being the narrowest at Salm, where it is not above 1½ verst over.

The temperature of the air is moderate and salubrious; the soil is in most parts sand, loam, and

and clay, and therefore poor; but with good manuring with cow-dung or ſea-weed, and proper culture, it produces good corn, particularly wheat, rye, and barley; in favourable ſeaſons likewiſe oats and peas; only the quite ſandy parts ſeldom yield good barley, eſpecially in dry ſummers, as it then all runs to ſtraw.

The ſtone-quarries here are fine and very productive. A ſtatuary from Peterſburg came hither in 1778, and dug out large blocks of limeſtone four or five yards long, of which he made the ſtatues for the new imperial armory at St. Peterſburg, and ſince that time great quantities of blocks and ſlabs for table-monuments, &c. have been ſent to that place. The academy has likewiſe obtained various kinds of beautiful and rare ſtones from Œſel. The marble lately diſcovered is veined of blue, red, and yellow, but is not found in large pieces; beſides, it appears to be not of ſufficient maturity. Black and grey flagſtone are found here; likewiſe red-beſprinkled grindſtone in large maſſes, which, there being no other demand for them, are broke to pieces by the boors.

The character of the Œſel peaſantry much reſembles that of their brethren the Eſthonians, only that the former are more cleanly and orderly, are in general not given to drinking, and

ſuch as exceed a little in that particular, prefer beer to brandy. In muſic and dancing, thoſe of Œſel ſhew more taſte than the inhabitants of the adjacent continent: we occaſionally meet with boors who produce very tolerable airs from their favourite inſtrument the bagpipes; they have likewiſe two ſorts of dances; one, called by them the ſuur or kœrge tants, i. e. the great or high dance, and another named piſſuke tants, the little dance. Their houſes are more commodious and more adapted to health than thoſe of the Eſthonians; they have windows, and ſome begin to have chimnies. In ſome of the rooms are deal-floors: ſeveral of the wealthier ſort no longer burn laths for light, but uſe tallow candles, and the opulent boors along the coaſt have iron lamps with ſea-dog-oil: however theſe elegancies are very rare, the generality live in much humbler ſtyle.

For the Eſthonians and the Lettiſh an almanac is annually printed in their own language, and ſold at an eaſy price: but the boors of Œſel make themſelves their kalendar; for which purpoſe, as they cannot write, they have made choice of certain ſigns, which they mark in an artleſs manner on ſeven narrow flat ſticks tied together by a thong, or more properly on thirteen ſides. On each ſide is a month conſiſting of 28 days.

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By this kalendar they know at once every week-day, every immovable feſtival, and every day that is memorable among them by any ſuperſtitious rites; for each has its peculiar ſign. They begin to reckon every ſucceſſive year one day later than the laſt; and in the uſe of the kalendar they follow the practice of the Hebrews, and other oriental nations, who begin their books at what with us is the end, and read from right to left.

MOHN, called by the Eſthonians Muho ma, which literally ſignifies, the land of boils or ſores. The ſtrait, called the great ſound, which ſeparates it from the main land is about 12 miles over; the tranſport being made in ſummer by large boats, called prames. The like paſs between Mohn and Œſel acroſs the little ſound, which ſomewhat reſembles a large haven. Various reaſons have been alleged for ſuppoſing that it gradually aroſe and ſeparated the two iſlands. Henry the Lettonian deſcribes the tract to Œſel with great accuracy; he relates the difficulties of the voyage; but ſays not a word of the little ſound, in mentioning the diviſion of the province to which Mohn belongs. Mohn lies to the ſouth-weſt of Œſel, forming a pariſh of itſelf, with its own church and preacher. Ships in paſſing the great ſound take boors as pilots on board,

board, to whom they pay 5 rubles. Near the middle of the iſland on an eminence ſtands the church. Many of the boors live comfortably; almoſt every one of them having his own little portion of foreſt, which they keep neat and clean on account of the ſcarcity of fuel, and which as well as their hay-fields are incloſed by a ſort of wall of ſtones laid one on another. As a ſhelter from the ſtorms to which theſe ſeas are ſubject, ſome have built their houſes in the midſt of theſe little thickets, carefully gathering up the dry twigs that fall off in the autumn to ſave fire-wood. By this prudent diligence their woods have a very elegant appearance; but on the coaſts nothing is to be ſeen but hay-fields and rocks. Not only acorns and bilberries, but alſo wild nuts and crab-apples grow here, of which laſt the boors make a tolerably well-taſted cyder; in the farms they alſo uſe them for ſwine-maſt. By collecting the ſtones for incloſures, the inhabitants have cleared their fields of them and gained conſiderable ſpots of land. The circumference of the whole iſland amounts to 65 verſts. The paſſage over the great ſound in ſummer with oars is made in about four hours, but with a ſail and a fair wind, in leſs than two.

To Mohn belong two ſmall iſlands; one lying towards the north, and quite uninhabited, is merely

merely a hay-field for the boors of Mohn; the other lies nearly between Œſel and Mohn, in the little ſound, and here live three boors. For ſome years paſt Œſel as well as Mohn have been viſited with the diſtemper of the horned cattle, but not raging with ſo much violence as on the terra firma. — Here is a large ſtagnant lake, from which a canal has been made to the ſea. The whole place is full of ſhilf ſo as to look like a wood; but it is cut down and turned to profit. The proprietors of eſtates have erected two ſluices that the canal may be ſhut in, by which an uncommonly productive fiſhery has ariſen here of the fiſh that come up the canal in the ſpring after the freſh water.

Ruun, for ſo it is pronounced; Runo, Runeholm, as it is uſually called, come from the Swediſh. In an extenſive ſenſe it belongs to the province of Œſel. This iſland lies in the middle of the gulf of Riga, at the diſtance of 90 miles from the town of that name, and juſt as far from Œſel. It is diſtinguiſhable far off at ſea by a foreſt of birch-trees, which occupies one of its ſides. It is entirely the property of the crown, and is inhabited ſolely by ſwediſh boors. Here is a church and a preacher; who, if we may judge from the ſmallneſs of his congregation, muſt be of

of a contented diſpoſition, and exerciſed in patience; though his income is very decent, having the tithe of all the products of the iſland, and a parcel of land beſide. Veſſels rarely paſs between this and Riga; but the people take little concern about the tranſactions of the firm land. In behoof of the ſhips here is a light-houſe, for a ſupply of which the boors are obliged to buy the fuel on the firm land, for which the crown allows them 40 dollars. There is no farm on the iſland, except that of the paſtorate. The arendator collects the ſtated impoſts merely from the boors, which amount to no great matter. For ſettling the differences that ariſe among the boors, the paſtor, with a convocation of the elders, decides in the firſt inſtance; the diſcontented have an appeal from this deciſion to the arendator. It is affirmed, that, among the inhabitants are found ſome remains of the old Livonians: they ſpeak the runic language, which is entirely confined to them, and perhaps is the true Livonian; alſo the eſthnic, the lettiſh, the ſwediſh, but moſt commonly the german and ruſs, each with facility from their frequent intercourſe with others. In the labours of the chace and the capture of the ſea-dog, they are indefatigable, whereby they gain an opulent ſubſiſtence.

ence. They live in great harmony, and only intermarry among their own ſociety*.

Dago lies nearly in the 59th deg. of n. lat. exactly oppoſite to Œſel, from which it is ſeparated by a ſmall ſtrait. It is diſtant from the main land upwards of 18, and in ſome places above 30 miles. This iſland is at leaſt 54 miles in length, of an oblong ſhape, having a promontory extending weſtward far into the ſea; a ſmaller one to the north-eaſt, another to the ſouth, and a fourth almoſt due eaſt. The others are leſs conſiderable. Each of the four principal ſides, which are not all quite equal, reach in a ſtraight line from about 25 to 35, but along the ſhore, on account of its ſinuoſities, to at leaſt 48 miles. In regard to the main body of the iſland, the inhabitants reckon it in length from 30 to 36 miles, and in breadth 24; but, taking the promontories into the account, the right line from eaſt to weſt gives a breadth of 48 miles; and from ſouth to north a length of 36 miles. The weſtern promontory is about 18 miles long, and as many broad.

The paſſage from the main land to Dago is uſually either acroſs the iſland Vorms; or paſſing

* Theſe accounts are communicated by paſtor Haken, at Yamma, who is very advantageouſly known to the people of theſe parts.

by

by the little isle of Hestholm southward or northward. Many direct their course by the village Vachterbæ, where a forest of alders, seen at a great distance, serves for a land-mark; hence it is forbidden, under very heavy penalties, to cut down a tree of this forest. In summer-time the passage is very safe across the sound in a little boat with three boors; though by reason of some unavoidable circuitous routes, the passage is reckoned at from 24 to 36 miles, and even more. There is doubtless great danger from sudden squalls of wind; but misfortunes are not often heard of, as the parts being well known to the inhabitants, they easily run into some bite of one of the petty isles. It frequently happens that a passenger is long detained by contrary winds, and, not being accustomed to take much provisions for so short a voyage, does penance for this neglect by suffering extreme hunger.

The numerous shallows, sand-banks, and small islands, render the navigation about Dago somewhat perilous; and ships are often stranded here. On the western promontory, whose extreme point is known to mariners by the name of DAGERORT, a light-house is maintained for their benefit. It stands about 3 miles from the sea, on a mountain computed to be 22 fathoms in perpendicular height.

No

No peſtilential diſeaſe was ever known to make any ravages here; and the population is ſo great, that the eſtates are almoſt burdened by the ſuperfluity of people. Accordingly in ſummer many of them go to the main land and gain a livelihood by ditching, bricklaying, plaſtering, &c. where likewiſe whole families are often ſold. The land is not ſufficient to their ſupport, and the landlords would derive no profit from their eſtates if they were obliged to maintain their vaſſals. As they cannot all live by agriculture, many turn their hands to various arts and handicrafts, in which, by their uncommon ingenuity, they ſucceed ſo well as ſufficiently to confute the prejudice concerning the ſtupidity of the Eſthonians. We find among them numbers of expert workmen in gold and ſilver, turners, clockmakers, lockſmiths, carpenters, joiners, and even ſhipbuilders. The majority of the country-people are Eſthonians; yet here are many, even whole villages of ſwediſh boors: all of theſe however have not equal privileges with the former. The iſland is deficient neither in foreſts nor in ſtone. On the weſtern part is much ſand; but the ſouthern and eaſtern parts conſiſt of a bluiſh clay, and therefore a fertile ſoil. Accordingly a conſiderably quantity of good corn is produced; only the ſeed requires to be ſown ſomewhat early.

Barley

Barley thrives well in rainy ſeaſons. The counts de la Gardie were the principal proprietors in the iſland, and four capital eſtates now belong to one of their deſcendants, the counteſs Stenbock. The ſand-banks that lie about Dago, at low-water reſemble iſlands; but in long weſternly winds are overflowed. Near the Puhalep church are the ruins of an antient caſtle, which the boors call Vallipea, denoting a fortreſs, and which they pretend to take its date even from the heatheniſh times. Perhaps it is only the fort Gurgenſburg, built by the Swedes in the ſixteenth century.

VORMS *, to which the common charts unaccountably give the name of Ormſon. It is in length 12 miles; in breadth 6 verſts, and the ſhape of it nearly quadrangular.

NUK, or Nukoe. This iſland at times becomes a peninſula; being joined to the firm land: but, when the water is high, and the wind blows from the ſea, the flood runs ſo between, that it is entirely cut off from the land, though at times it is poſſible to walk dry-ſhod from either to the other.

KASSAR, to the ſouthward of Dago, with a chapel, is 6 verſts long and between 2 and 4 verſts broad.

* In eſthnic it is called Vormſiſaari.

ODENSHOLM, lying to the north of Nuk, likewiſe with a chapel.

HESTHOLM, that is, Horſe-iſle, to the ſouth of Vorms, uninhabited, and only viſited for taking its crop of hay.

The other little iſlands, which are frequented only for the laſt-mentioned purpoſe, and that of the fiſhery, need no farther notice; ſome of them are merely rocks or ſand-banks.

HOCHLAND, or Highland, is an oblong rock, 3 or 4 verſts in breadth, and 8 or 10 in length, ſhooting up almoſt in the middle of the gulf of Finland, and diſtant from St. Peterſburg 165 verſts, from Viborg 106, from the ſhore of Eſthonia 62, and from the coaſt of Finland 45. The channel about this iſland is from 20 to 30 fathom, and ſtill nearer the land of ſufficient depth; ſo that ſhips of the largeſt conſtruction may ſail round it. Two light-houſes are kept here by the crown. Hochland may be ſaid to be one maſs of ſtone; not only becauſe it moſtly conſiſts of rocks, but alſo becauſe one rock adheres to the other. Theſe pieces of rock are almoſt innumerable, and of various dimenſions; five of them however are remarkable for their height. In the heart of the iſle is a deep and gloomy vale, not above 100 fathoms wide, in which are ſtill to be ſeen ſome remains of a very

antient bridge. The iſland has likewiſe a great deal of ſwampy ground; it is not, however, deſtitute of wood, ſuch as pines, firs, birch, alder, &c. On the higheſt rocks are three little lakes, not without fiſh; neither is there any deficiency of freſh ſprings. The inhabitants are Finns, amounting to about 30 families. It cannot be expected that the arts of agriculture are much practiſed here; however there are ſome meadow-lands. Of domeſtic animals here are only a few black cattle and a little flock or two of ſheep. Of wild fowl, they have woodcocks, ducks, eagles, hawks, crows, mews, ſparrows, yellow-hammers, chaffinches, &c. magpies are not to be ſeen, though they abound on all the firm land of theſe parts. Seals are caught in great abundance; and dolphins are often taken. Of the kinds of fiſh, herrings*, are in the greateſt plenty. Lead-ore is ſaid to have been found here.

TYTERSAARI is a round iſland, pretty high, but not above 10 verſts in circuit. It lies 18 verſts to the ſouth-eaſt of Hochland. As appendages, on the weſtern ſide, or in the ſound between it and Hochland, it has four ſmall iſles, quite low, but pretty far aſunder: Kleintitter, the two Viri, and Vuotcalla, and on the ſouthern

* Clupea

ſide

ſide a ſtony ground, 7 or 8 verſts in length, to the Narva paſſage; hence, it is hardly poſſible to land on this iſland. A third part of it is rock, another third is moraſs, and the reſt an arid and ſterile ſand-hill. The iſland has no ſprings. The ſeal-fiſhery is here conſiderable. The inhabitants live together in one village.

LAVANSAARI is 7 verſts long and 4 verſts broad. It is diſtant from St. Peterſburg 120 verſts, and from Viborg 82. Of all the iſlands in the gulf of Finland this is the moſt populous, except Cronſtadt, containing upwards of 40 families. It is ſurrounded on the north-weſt ſide by ſeveral petty iſles and ſhallows; it has however no leſs than three harbours, capacious enough for even a large ſhip to run into. In the middle of the iſland is a lake, ſmall indeed, but full of fiſh. Somewhat of agriculture is in practice here; and formerly there were ſpecimens of foreſts. The animals on this, are the ſame as on the foregoing iſlands.

PENISAARI is only 3 verſts long, and half a verſt broad, and lies 6 verſts from Lavanſaari. It is inhabited only by a few families, and has no water-ſprings.

SEITSAARI is 5 verſts long, and about half as much in breadth, and is 95 verſts diſtant from St. Peterſburg, and 75 from Viborg. The ſand-

banks here reach as far as to the peterſburg channel, and, being inviſible from their lying under water, are ſo dangerous in dark nights, that in this place alone not fewer veſſels have been loſt than in all other parts of the gulf of Finland together. The land is every where unfruitful; in ſome of the marſhes there is indeed a ſlight crop of hay. Great numbers of eels and ſtone-pearch are caught here. The herring and ſeal fiſhery is here alſo conſiderable. The inhabitants make up about 20 families. Here is likewiſe a light-houſe.

CRONSTADT. This iſland was called by the Finns, Retuſari, and by the Ruſſians Kotloi oſtrof*. In 1723, together with the town, it obtained the name of Cronſtadt. It lies at the eaſtern extremity of the gulf of Finland, which, from this iſle to Peterſburg, is called the gulf of Cronſtadt. It lies weſt-north-weſt of St. Peterſburg, 39 verſts; is 7 verſts from Oranienbaum, and from Seſtrabek 12. The iſland, from eaſt to weſt, is 8 verſts long, by about 1 verſt in breadth; is flat, ſomewhat about 8 fathom higher than the water-level; has ſome wood, chiefly birch, the black alder, and ſome firs. The ſoil, as is ſeen in digging the canals and docks, conſiſts, under the ſcanty ſod, of layers of clay,

* Kettle-iſland.

ſand,

ſand, and limeſtone. Two petty iſlands on its ſouth ſide are occupied by forts, one of which is called Cronſlot, and the other fort St. Alexander. There is ſtill a third, on the northern ſide of the channel, ſmaller than either of theſe, bearing the name of St. John. Cronſtadt was built by Peter the great in 1710, as a town, and harbour for ſhips of war and merchantmen, to which purpoſes he had already deſigned it on laying the foundations of St. Peterſburg. The town comprehends the eaſternmoſt part of the iſland, is ſpacious, containing a number of good houſes, churches, and public edifices; but, on account of many inferior buildings, mean houſes, vacant places, &c. by no means handſome. It is populous, eſpecially in the ſhipping ſeaſon, when the ſtreets are thronged with mariners from all the ports of Europe, particularly the Engliſh; on whoſe account, as well as thoſe of our countrymen, who are ſtationary on this iſland for the purpoſes of commerce; here is a chapel maintained by the Ruſſia company of London, at which the ſervice of the church of England is regularly performed every Sunday throughout the year. The Lutherans have alſo a church on this iſland, for the uſe of the Germans. Numerous as the inhabitants of this place are, from the fleet lying here, the

garriſon, the cuſtom-houſe, the corps de cadets, the labourers in the docks, yards, &c. together with their connections, and the families that live here for the reaſons above-mentioned, yet the number of regiſtered burghers is but ſmall; in the year 1783, they were only 204. The man-of-war's mole, as it is called, in its preſent ſtate, is well worth the attention of the curious, and accordingly is viſited by the numerous travellers that take Peterſburg in their route, with great ſatisfaction. It is incloſed by a ſtrong and elegant rampart built of granite in the ſea, under the direction of that gallant commander and upright man, the late admiral Samuel Greig, to whoſe unwearied activity and uncommon talents the ruſſian navy is ſo highly indebted, and whoſe loſs will not eaſily be compenſated to the empire. Here are alſo the celebrated Peter's-canal, and the docks. The canal was begun under Peter the great, and completed by general Lubras in the reign of Elizabeth. At the end of the canal ſtand two pyramidal columns with inſcriptions relative to this undertaking. It is lined with maſonry, is 1050 fathoms long, in breadth at bottom 60 fathoms, and at top 100; it is 24 fathoms deep, and in this manner ſtretches 358 fathoms into the ſea. Adjoining to the canal are the docks; in which 10 and more ſhips

of

of the line may be refitted at once. They are furniſhed with floodgates for admitting and letting out the men of war. The water is evacuated from the baſon by a ſteam-engine conſtructed by an engliſh engineer, and is worked by coals from England. Here is a foundery for caſting cannon-balls, under the direction of that ingenious artiſt Mr. Baird, from North Britain; and a rope-walk for making ſhips-cables of all ſizes. — The marine cadet-corps was founded by Peter the great in 1715, for the education of ſea-officers; and the empreſs Elizabeth enlarged it in 1752, for 360 pupils. It is now removed to Peterſburg, on the Vaſſilli-oſtrof, where it had been before it was placed at Cronſtadt; being under the ſuperintendance of an admiral, till lately admiral Kutuſof, and having officers of the navy for its inſpectors. The cadets are of noble families, and divided into three companies of 120 each. They are inſtructed in languages, geography, aſtronomy, naval architecture, and navigation, in climbing the ſhrowds, handling the rigging, ſwimming, &c. and the greater lads who are called mariners, are taught all the functions of the ſervice; and, in order to become midſhipmen, the loweſt rank of officers, muſt have made three voyages as cadets. Their

uniform is green, with white facings and underclothes. — The marine hoſpital at Cronſtadt is on a very extenſive ſcale. In 1788, it had at ſeveral times 25,007 patients; and in 1789, it had 16,809. Of the former number 20,924 went out cured, and of the latter 12,974.

BALTIC PORT. This is the ſame with Rogervik from Rog, the iſland in which it is formed.

Of the inland Seas, and principal Lakes of Ruſſia.

The Caſpian.

THIS large body of water, being not viſibly connected with any of the great oceans, and apparently not having an outlet, has been thought by ſome writers not properly to deſerve the appellation of a ſea, but to be more fitly claſſed among the larger lakes. However, on account of its fiſhery and the perſian commerce it is of great conſequence to the empire.

The Caſpian, mare Caſpium, was antiently called by the Greeks the Hyrcanian ſea; the Tartars give it the name of Akdinghis, the White-ſea; by the Georgians it is termed the Kurthenſkian ſea, and the Perſians denominate

it Gurſen, from the old perſian capital, Gurgan, which is ſaid to have ſtood in the province of Aſtrabat, only 7 verſts from the ſea. The name Hyrcanian ſea is as much as to ſay the perſian ſea; for, in the perſian language, Perſia is not called the perſian, but the Hyrcanian empire. The Caſpian reaches in length, from about the 37th to the 47th deg. of north lat. and in breadth, where it is the wideſt, from the 65th to the 74th deg. of longitude. Its ſuperficial contents amount to above 36,000 ſquare miles, engliſh *. The antient geographers had but a very imperfect knowledge of it. Some thought it was connected with the Frozen-ocean, while others were of opinion that it joined with the Euxine. Ptolemy, among others, embraced the latter hypotheſis; affirming that there was a ſubterraneous communication between the waters of both: as, otherwiſe it was not to be explained how ſo many large rivers ſhould flow into the Caſpian,

* What M. Pallas ſays of the antient extent and decline of the Caſpian highly deſerves peruſal, in his travels, part iii. p. 569 & ſeq. But the inſertion of it here would render the article too prolix for the deſign of this work. It is not only probable that its antient ſhore might be fixed at the Obſhtſhei-Syrt, but that the Caſpian was once connected with the Baltic, and this again with the Euxine; whereof a proof may be ſeen in the quality of the earth in all theſe parts.

for

for which there was not one channel out of it. And, indeed who can wonder at the difficulty in which they found themſelves involved? For what becomes of the waters of the Volga, the Yaïk, the Yemba, the Kur, or Cyrus, of the Araxes, the Byſtraia, the Akſa, the Koiſa, the Terek, and the numberleſs others that flow into it? By the ſun alone they cannot be evaporated *; there is no viſible outlet for them; and yet the ſea is never perceptibly ſwollen, except merely in the ſpring on the melting of the ſnows.

They who have recourſe to ſubterraneous paſſages, through which it muſt flow into the perſian ſea, or more probably into the Euxine, uſually bring two arguments in ſupport of their notion. In the firſt place, ſay they, the Caſpian riſes very high in a weſterly wind; whereas the Euxine, on the contrary, rages moſt when the wind is at eaſt: conſequently, the eaſt wind favours the exit of the waters of the Caſpian, and the weſt wind impedes it. But this is a fallacia cauſæ non cauſa. All the winds that bring damp vapours with them are more ſtormy than thoſe which come from arid regions. But now

* For a more particular diſcuſſion of this matter, the reader is referred to the ſtate of Ruſſia, by the ingenious Capt. Perry, p. 100 & ſeq. printed at London, 1716.

the

the weſt wind comes hither from the Euxine and the Palus Mœotis. Conſequently the Caſpian muſt neceſſarily be put in more vehement agitation by it.

Secondly, it is pretended that there is in this ſea a whirlpool, which, with a horrid noiſe, ſwallows up all the ſuperfluous water, and diſcharges it into the Euxine. In proof of this, it is farther urged, that a ſpecies of ſea-weed, growing only on the ſhores of the Caſpian, is found at the mouth of this tremendous vortex. To which they add, that near to this vortex is a ſort of fiſh found no-where elſe but in the Euxine. And laſtly, that in days of yore, a fiſh was taken in the Caſpian ſea, with a golden ring about its tail, on which was this inſcription: Mithridates mihi dabat in urbe Sinope libertatem et hoc donum *. But later accounts know nothing of a whirlpool; the fiſhes that are ſaid to be found only there and in the Euxine, we ſhall be better able to ſpeak of when they are more accurately deſcribed; and the ſtory from Kircher has very much the air of a fiction. Sea-weed grows every where on the ſhores of this ſea, from Aſtrakhan to Sulak, and thence again to the muganian ſteppe.

* Kircher, Mund. ſubterr. lib. ii. cap. 13.

The

The natural evaſion of the waters of the Caſpian into the Euxine is therefore an ungrounded hypotheſis. An artificial one was attempted by Seleucus Nicanor, after the death of Alexander the great: but, from cauſes unknown to us, his attempt proved abortive. However, it is aſſerted by travellers, that traces of very deep vallies are ſtill to be ſeen, through which the canal is ſaid to have gone. In the reign of Peter I. it was that the Caſpian began to be more accurately ſurveyed, when it was found to be in length about 1000 verſts, but in its greateſt breadth not more than 400. Thus, in its extreme length, from the river Ural, which is its northern extremity, and lies in 46° 15′ north lat. quite to Aſtrabat, its extremity to the ſouth, in 36° 50′ it is 9° 25′ long, which makes 646 engl. miles, reckoning 69 miles to a degree. The breadth of it is extremely various. Its greateſt northern breadth, from eaſt to weſt, is between the gulf of Yemba and the mouth of the Volga, containing 265 engl. miles. Its ſouthern broadeſt part is from the river Orxantes on the eaſtern, to the river Linkeran on the weſtern ſide, comprehending 235 engliſh miles. The whole circuit, including the gulf, is 3525 verſts. The coaſts of the Caſpian, from that point of land

land which forms the Agrachan-gulf towards the weſt, as far as the river Kulala in Turcomania towards the eaſt is all round northwards low, flat, and ſwampy, overgrown with reeds, and the water ſhallow. The direct diſtance from this gulf to Kulala is 170 engl. miles. On the whole remaining part of the coaſt, from Kulala ſouthward, and back to the gulf of Agrachan, the country is hilly, has a ſteep ſhore and deep water. Of the rivers that were formerly ſuppoſed to diſembogue into it, ſeveral do not exiſt, for inſtance the Yakſartes and the Oxus, which were pretended to flow hither from the eaſt. The chief of thoſe that are known to fall into it are: the Emba, the Ural, the Volga, the Kumma, the Terek, the Sulak, the Agrachan, the Kur, and the Aras. — It is related as a ſtriking peculiarity of the Caſpian, that during 30 or 35 years its waters are conſtantly increaſing, and then for the ſame term continually decreaſe; but this ſtory is unſupported by any ſtated obſervations. Much more certain are the violent and dangerous ſtorms * which frequently happen on this ſea. The ground, in many places, not far from the ſhore, is already ſo deep that a line of 450 fathom will not reach it. The water in general is ſalt; but not in all

* Burun.

places,

places, particularly not in thoſe where the great rivers empty themſelves into it. The ſhores are for the moſt part flat, and only on the eaſt ſide mountainous.

Perhaps the true reaſon of this ſea remaining equally full, is to be ſought in the quality of its bottom; which conſiſts, not of a thick ſlime, but of a ſhell-ſand, the particles whereof touching but in few points, it is conſequently very porous. Of the ſame ſubſtance the whole ſhore is likewiſe formed. Layer upon layer it lies 3 fathoms deep. This indeed lets the freſh water through, but it becomes immediately ſalt again by the ſalt water preſſing on it. Through this ſand then the water is filtered, and falls into the abyſs beneath in the ſame quantity as it flows into the ſea.

In the bay of Emba, above the river Yaïk, the reverſe is ſeen. The water there is not let through: it therefore ſtagnates, and even the fiſhes putrify. Its exhalations are extremely noxious. The wind that blows over this bay has been known to come on with ſuch ſurpriſing force as to throw down the ſentinels of the ruſſian forts erected here, with ſo much violence as to kill them.

Of the fiſh with which theſe parts abound our accounts are not very circumſtantial. The

ſalmon,

ſalmon, however, are as good as thoſe of Riga and Archangel, and even more fleſhy and fat. The herrings too are remarkably large, and plumper than the engliſh and dutch, but not ſo tender.

This ſea gives nouriſhment to myriads of the winged race. Storks, herons, bitterns, ſpoonbills, red geeſe, red ducks, and numberleſs others. But the moſt beautiful of all is the red gooſe *. It has however nothing in common with a gooſe, neither is it red, but white; the tips of the wings indeed, round the eyes, the beak and the feet are ſcarlet. It is of the ſize of a ſtork, has a long neck and high legs, is very ſavoury to the taſte, and lives on fiſh. It may be called Ciconia, vel ardea, roſtro adunco lato brevi.

A ſpecies of red wild ducks is alſo frequent here, which fly in the evening to the tops of the trees and the roofs of houſes, where they perform a noiſy concert. Their fleſh is well taſted, not oily, though, like other water-fowl, they feed on fiſh.

Of leeches here are two kinds, the hog-leech and the dog-leech, Their holes have two aper-

* Ruſſ. kraſnaia gus.

tures,

tures, one towards the ſouth and the other facing the north, which they open and ſhut according to the change of the wind.

On the ſhore, between Terki and Derbent, grows a graſs on which all the quadrupeds feed with avidity: to the horſe alone the eating of it is fatal. They die upon the ſpot. Peter the great cauſed the experiment to be made in his preſence, and the common report was found to be true.

The Caſpian contains a conſiderable number of iſlands, moſtly ſandy; and to the fiſh above-mentioned we may add the following: the ſterlet, two kinds of ſturgeon, ſeals, and porpuſes. Flux and reflux have here never been perceived.

The principal harbours and roads of the Caſpian are: 1. Derbent; which, however, ſcarcely deſerves that name; and even the road, by reaſon of its rocky bottom, is very incommodious. 2. Niſovaia-priſtan, over-againſt the mouth of the river Niſabat, where there is a good road of firm ſand. 3. Baku; here is the beſt haven in the whole Caſpian, being full two fathoms in depth. 4. Sallian, in the northern arm of the river Kur. 5. Enſili, or Sinſili, has indeed but an indifferent road, yet it is one of the

the principal ports of trade. 6. Medſhetifar and Farabat. 7. Tukaragan and Manghiſhlak, have good harbours. — The governments of Uſimſk and Caucaſus border on the Caſpian.

The Baikal.

It lies in the government of Irkutſk, and extends from the 51ſt to above the 55th deg. north lat. The Ruſſians ſtyle it a ſea, morè Baikal *; but, if the Caſpian be not allowed that title, the Baikal can ſtill leſs pretend to it; however, the Ruſſians honour it yet farther by giving it that other name of Svetoie morè, the holy ſea. Whether it be lake or ſea, next to the Caſpian it is the largeſt body of water in the ruſſian empire. In length it is between 500 and 600 verſts, and in its various breadths is 20, 30, 50, and in ſome places 70 verſts. Surrounded almoſt entirely with high and moſtly bald mountains. Towards the latter end of December it is uſually frozen over, and in the beginning of May the ice breaks up. The water of the Baikal is uncommonly clear, but it is ſubject to frequent ſtorms, and theſe very violent, particularly in September. It abounds in fiſh, and contains, among others, great ſhoals of a

* Mare Baikal.

ſpecies of herring, there called omuli. Here are alſo plenty of ſeals. The Baikal has ſome iſlands, whereof the principal bears the name of Olkhon, in the proximity whereof ſulphur ſources are found. Among the rivers that empty themſelves into this ſea, the principal are: the upper Angara, the Barguſin, and the Selenga, which join it from the north, the eaſt, and the ſouth; whereas, only one ſtream, the great Angara, in the weſt, derives its origin from it. Travellers intending to go beyond Irkutſk, into the remoter eaſtern parts of Siberia, commonly take their paſſage acroſs the Baikal. There is indeed a road that leads round it, but it is attended with great difficulties.

The LADOGA lake. It lies in the government of Vyborg, between the gulf of Finland and the lake of Onega. In antient times it is ſaid to have been called Nebo. Being in length 175, and in breadth 105 verſts, it is reckoned one of the largeſt lakes in Europe. It produces a great number of ſeals. On account of the perilous ſtorms to which it is liable, and the ſeveral ſand-banks which are ever ſhifting their poſition, Peter the great cauſed the famous ladoga canal to be dug along its ſhore, from the Volkof into the Neva; which canal is 104 verſts long, 10 ſajènes broad, one ſajène and a half deep, and

has

has 25 ſluices. By the Neva the Ladoga is connected with the Baltic; by the Svir with the Onega; and by the Volkhof with the Ilmen. Into the canal flow the rivers Lipke, Naſia, Sheldika, Lava, and Kabona; into the lake the rivers Paſha, Siæs, Oiæt, &c. Whereas the Neva alone runs out of it. — Only the ſouthern part of the lake belongs to Ruſſia, which has every where a low ſhore and a ſandy rim. On this ſhore it has alſo a few low fiſhery iſlands and a ſandy bottom. That part of the northern ſide which lies in the government of Olonetz has marble on its coaſt, whence ſome of thoſe beautiful and durable kinds of finniſh marble are brought to St. Peterſburg. As the bed of this lake, for a great extent, is in the loweſt part of the country, it receives beſides the above-mentioned rivers, the waters that come from the alum hills; all of which, as before obſerved, have no other outlet than the Neva.

The lake ONEGA. It lies in the government of Olonetz, between the Ladoga and the Whiteſea. Its length is between 180 and 200 verſts, and its breadth from 60 to 80. Like the Ladoga it contains a few iſlands conſiſting of marble, and in all other properties is much the ſame. With other rivers, the Vitegra falls into

it on the ſouth-eaſt ſide, which river takes its riſe not far from the Koſſha, which falls into the Bielo-ozero. On the Koſſha is the priſtan Badoga, and on the Vitegra the priſtan Vitegorſkaia, which are only about 40 verſts aſunder. Now, as from the Onega the navigable river Svir runs into the Ladoga; and from the Bielo-ozero the Shekſna flows into the Volga, there needs only a canal to be cut the ſaid diſtance of 40 verſts, for connecting the Neva with the Volga, which would be much more convenient for the navigation here than the paſſage by Viſhnoi-volotſhok, becauſe there are no waterfalls, and therefore all the danger and trouble attending them in the preſent paſſage would be obviated.

The lake PEIPUS, or Tſhudſkoe-ozero. It lies between the governments of Pſcove, Reval, Riga, and St. Peterſburg, extending in length to about 80, and in breadth to 60 verſts. By means of a very broad ſtrait it is connected with the Pſcove lake, the length of which is ſtated to be 50, and the breadth, which is always decreaſing, 40 verſts. This latter receives the river Velikaia. Out of the Peipus comes the Narova, which through the Embach has communication with the Vertz-erb lake; out of this, on the other hand, flows the Fellin into the

gulf

gulf of Riga; and conſequently a very beneficial water-paſſage might be made between Riga and ſome of the inland provinces, by way of the Peipus lake. — The commodities which go to Narva along the Narova are obliged, on account of the falls in that river, to be carried a great way by land. There are a few ſmall iſlands in the Peipus, but not of conſequence enough to deſerve much notice, excepting indeed Porka or Bork, called by the Eſthonians Porkaſaar, which is not only inhabited, but is furniſhed with foreſts, and has no leſs than three villages upon it. A little gulf that is conſtantly incroaching more and more upon the land, may, in no great ſpace of time, compel the inhabitants in its vicinity to ſhift their habitations. — Among the ſeveral brooks and rivers that flow into the Peipus, the Embach is the moſt conſiderable. The exit is through the Narva river into the gulf of Finland. It greatly facilitates the commerce between Pſcove, Dorpat, and Narva; though this advantage might doubtleſs be rendered more beneficial, and extended to more diſtricts by ſome improvements; particularly if Dorpat could be enabled to ſend the products of the circumjacent country by water to Narva. Inſtead of ſix horſes and as many men, the tranſport of a load of rye would then

require only two people. — In ſtormy weather the badly-built barks and other veſſels are not unfrequently very much damaged; an inconvenience that might eaſily be prevented by orders from the magiſtracy to conſtruct the veſſels by certain regulations. — The vaſt multitudes of fiſh that breed in this lake afford a lucrative occupation to the boors of theſe parts, and increaſe the revenues of the adjoining eſtates, the owners of which let out the parts on which their lands abut at a certain rent. The corn lands adjacent to the ſhores are by no means ſufficient to the nouriſhment of the people employed in fiſheries; this deficiency however is abundantly ſupplied in autumn and winter by the barter of fiſh againſt flour. The fiſh are principally, rebſe, a ſpecies of herring, and barbel. The former are ſold for 30 to 90 kopeeks a thouſand. A hundred barbel will coſt from 3 to 6 rubles, but for a live one they will get at leaſt 20 kop. Beſide theſe here are caught pike, pearch, a ſpecies of carp, whiting, quabb, koruſhki, gudgeons, &c. The pike and ſome others are dried in the air and exported; the rebſe are ſometimes ſmoked. If the fiſhermen were rich enough to keep a proviſion of ſalt always ready for ſalting what they do not immediately ſell of a good capture, they would not be obliged to throw away

away ſo much putrid fiſh as they do, to the loſs of their profit and their labour.

The ILMEN lake, formerly Moiſk, lies in the government of Novgorod, and is about 40 verſts in length and 30 in breadth. It receives the rivers Mſta, Lovat, Shelon, &c. and gives birth to the Volkhof alone.

The BIELO-OZERO, or White-lake, is in the ſame government with the foregoing; is about 50 verſts long and 30 broad, and receives into it ſeveral ſmaller ſtreams. The only one that flows out of it is the Shekſna, which falls into the Volga. The water of this lake is clear, having a bottom partly clay and partly ſtony. The clay is generally of a white colour, and in ſtormy weather cauſes a ſtrong white foam upon the ſurface of the water. Doubtleſs it is from this circumſtance that the lake firſt obtained its name Bielo*. It contains plenty of fiſh and crabs.

The lake TSHANY lies partly in the government of Tobolſk and partly in that Kolhyvan. It communicates with the lakes Moloki and Abiſhkan, is of a very conſiderable circuit, and abounds in fiſh.

The lake ALTYN-NOOR, or Teletzkoe-ozero, lies in the government of Kolhyvan, on a very

* White.

conſiderable elevation of the altaian mountains, by which it is alſo entirely ſurrounded. Its length is computed at 126, and its greateſt breadth at 84 verſts. From this lake ariſes the famous river By, which, at its conjunction with the Katunia, takes the name of Oby.

Of the chief navigable Rivers of Ruſſia.

So vaſt an empire as that of Ruſſia cannot but have a great number of conſiderable rivers. I ſhall here only take notice of the moſt material, arranging them according to the ſeveral ſeas into which they flow.

Rivers that flow into the Baltic.

The DUNA. This is named by the Ruſſians ſapadnaia Dvina, and by the Lithuanians Daugava. It derives its origin from a lake in the government of Tver, at Biala, not far from the ſources of the Volga, purſues its courſe through this and the government of Pſcove, conſtitutes the boundary between the governments of Polotzk and Riga, the republic of Poland and the duchy of Courland, and falls not far from Riga, at Dunamunde, into the Baltic. In its courſe it takes up ſeveral ſmaller rivers, as, the Toroptza, the Eveſt, the Oger, and the Yagel, and from Courland

Courland the Bulder-Aa. The Duna is navigable all the way from its uppermoſt regions, facilitating the commerce from ſeveral governments, and from Poland and Courland, to an uncommon degree. About a thouſand veſſels and barks, of various dimenſions, paſs annually along it, to and from the aforeſaid towns. It has however one inconvenience, which is, that near Dunamunde, there are a great many ſhoals, every year increaſing and ſhifting their poſitions, which occaſions much difficulty in the navigation. To this inconvenience may be added another, that, in the Dunaburg circle, there are ſeveral falls, the ſhooting whereof is attended with great difficulty and danger. Some reckon theſe falls at 14 in number. I ſhall only mention one near Seleburg, another by Lennevarden, and a third adjacent to Rummel. This third is the laſt the veſſels have to ſhoot before they come to Riga; the firſt is higheſt and moſt dangerous; a concealed point of rock threatens all the floats and veſſels that ſhoot the fall with imminent deſtruction, and numbers, at low water, periſh without redemption. The ſteerſman, notwithſtanding he has taken a pilot on board, muſt exert the utmoſt caution. The noiſe of the water allowing of no oral commands, they are uſually given by the hand or by waving the cap; and the

the people, juſt ere they come to the verge of the watery precipice, fall down on their knees and pray. The frequent diſaſters that happen here are very profitable to the couriſh boors that lurk in the adjacent caverns, or the purpoſe of appropriating to themſelves what they can from the wreck. No remedy has hitherto been deviſed for this great nuiſance. Between Uexkull and the Rummel, in the bed of the river, lie a number of large ſtones, ſome of which have been already blown up at the expence of the corporation of Riga. Theſe obſtacles do not allow at all ſeaſons of the year a free paſſage, which is only commodious or attended with the leaſt danger at high water in the ſpring. The few veſſels whoſe owners reſolve on a voyage back, againſt the ſtream, are obliged not only to be drawn by men, but muſt be unloaded at the falls. The conſtant defection of the water in ſummer renders the voyage ſtill more difficult and tedious; on the early coming on of autumnal froſts utterly impoſſible. — At Riga the Duna is 900 paces broad. Here annually in April a bridge of pontons is thrown acroſs it, and faſtened by poles, except the part that opens to let the ſhips go through, which is fixed to anchors. Generally in November the river is covered with ice, which in March or April again breaks up. The froſt not unfrequently

quently makes the water paſſable on foot in the ſpace of eight-and-forty hours. The bridge is then taken away, and ſafely laid by in a ſmall arm of the river, called the Soodgraben. The whole ſummer through, the great number of ſhips of all nations lying cloſe to the bridge on both ſides, is allowed by all travellers to be a fine ſight. — This Duna is the port of Riga. — But, as nothing is perfect, this beneficent river often puts the city and the circumjacent territory into the moſt ſerious alarm, and does them conſiderable miſchief. In the ſpring ſeaſon the ice drives hither from Lithuania; while about the town and to the ſea all is ſtill faſt. The outlet being ſtopped, and the accumulation continually augmenting, the moſt lamentable inundations have been frequently occaſioned. That of the year 1771 is, from the loſs of people, houſes, and cattle, and a damage of more than 200,000 dollars in amount, ſtill freſh in the memory of all men. In 1770, the cutting-through of the ſolid ice greatly facilitated the evaſion of what was floating, which alſo run off in 1772, without cauſing any damage. The ſalmon of the Duna are the moſt excellent and the deareſt of all Livonia. To conclude, this river has in general a ſandy and clayey ſhore, and a diſcoloured water.

The

The NEVA. It draws its current from the lake of Ladoga, traverſes the government of St. Peterſburg for 60 verſts in length, flowing through the city, and at laſt falling in ſeveral arms, into the gulf of Cronſtadt. It reaches the city under the walls of the Nevſki monaſtery, after having juſt above it admitted the waters of the rivulet Ochta. The ſeveral mouths of the Neva are all within the city; and are called: the Nevka, which runs on the right ſide, in the Viborg quarter, among the hoſpitals, and flows, in a beautiful ſtream, north-weſtward and then weſtward into the gulf. On its weſtern direction it divides on the right into the great Nevka, and on the left into the little Nevka, thereby, and by croſs arms, forming iſlands. Acroſs this diviſion runs the Karpovka, a moraſs-brook, from its left ſide to the little Nevka, and thereby forms the Apothecary iſland. The Nevka, the great * Nevka, and the little † Nevka, are from 50 to 100 fathom broad, have ſhallow places, ſome of which are often dry, good neva-water, and flow ſluggiſhly. The FONTANKA goes from the Nevka, on the right of the Neva, flowing as a ſlow moraſs-brook, firſt ſouthernly, then weſtward parallel with the Neva, to the Cronſtadt gulf, into which, with the great Neva, it formerly fell into

* Bolſhaia. † Malaia.

two

two arms. In the former reigns it had been deepened and lined with ſides of timber, but gradually filled up again, and in ſummer was partially dry. By order of her late majeſty it was dug afreſh, to a bed of one fathom in depth, and in breadth 10 or 12, and its ſides faced with hewn granite raiſed on piles to the height of a fathom above the water's level, with an iron baluſtrade; and, withoutſide of this, a pavement five feet broad of granite flags, for the accommodation of foot paſſengers. Its banks are now full of fine flowing neva-water, is navigable for barks of burden, and conſtitutes one of the chief ornaments of this imperial reſidence, worthy of the great and benign ſovereign who honoured it with her throne and her preſence. The expence of this undertaking, which Catharine the ſecond begun in 1780, by general Bauer, and completed in 1789, by prince Vaſemſkoi, was truly imperial. The length of the river is nearly 3000 fathoms or about 6 verſts. Every fathom of which on either ſide, without reckoning the digging of the river, or the procuring and the driving of the numberleſs piles for the ground-work, and excluſively of the ſumptuous bridges of ornamented granite that croſs it at various diſtances, the embanking it alone with granite coſt at firſt 182 rubles, but this

this price gradually roſe higher and higher, till at laſt 300 rubles were paid for every fathom in length on either ſide. — The MOIKA runs from the right of the Fontanka, not far below its departure from the Neva, and flows almoſt parallel with it, wherein it falls to the left of the great Neva, cloſe above its mouth. It was a moraſs-brook, like the Fontanka, and like it had been dug out in one of the former reigns, and faced with wooden walls. In this ſtate it ſtill remains, much choaked up in various parts, conſequently the water runs very ſlowly in ſummer, and is far worſe than that of the Neva, however it is uſeful for culinary purpoſes. The empreſs had ſignified her intention of having this river dug out and banked with granite, for the benefit and decoration of the city. — The KATARINA-CANAL, was likewiſe a ſwamp-ſtream, running above the Moika, and falling into the right ſide of the Fontanka, not far above its mouth. Catharine the ſecond cauſed it to be made between 7 and 8 fathom wide, and one fathom deep for its bed, and to be faced on both ſides, for its whole length of 4 verſts, with granite, like the Fontanka, and to be furniſhed with foot-ways, an iron baluſtrade, and deſcents for the conveniency of taking up water. An arm of it,

finiſhed in the ſame manner, runs by the Nicolai church, from the right ſide of the Katarina-canal, to the Neva, and is called, The NICOLAI-CANAL. That, named after the ſovereign, the Katarina-canal, was begun in 1764, and finiſhed in 1790. It has very much drained the low quarter of the town through which it paſſes, and procured it the advantage of pure running water, and a paſſage for barks loaded with wood for fuel, iron, and other neceſſaries. — The LITTLE NEVA* goes off from the main river on the right ſide under the walls of the fortreſs, and flows weſt-north-weſtward to the gulf. It is broader than the great Neva, but more ſhallow, and purpoſely rendered innavigable by Peter the great, on account of Sweden and the cuſtoms. Its right ſhore is left in its natural ſtate, without buttreſs, and has a parallel arm at the Petrovka, which, flowing to the Nevka, forms the iſle Petrovſk. The left ſhore has above, as far as the buildings on the Vaſſilli-oſtrof reach, a buttreſs of timber, and lower down, in the woods, two moraſſy collateral arms that form iſlands, and are called Tſhernaia retchka, or the black rivulet. — Having made this diſtribution of

* Malaia Neva.

waters,

waters, the main ſtream, or the great Neva, flows, in a ſouth-weſtward direction, from 150 to upwards of 200 fathoms in breadth, and in ſome places of great depth, into the Cronſtadt-gulf. Its right bank, as far as the buildings on the Vaſſilli-oſtrof reach, is ſupported by a wooden buttreſs five or ſix foot high. The whole extent of the left-hand bank, Catharine the ſecond cauſed to be quayed with granite, from the foundery to the fartheſt extremity of the Galerenhof, excepting only the ſpace in front of the admiralty. This grand work, which was begun in 1764, and completed in 1788, is diſtinguiſhed from the ſtone margin of the Fontanka by ſtill greater ſtrength and more magnificence. The ground under water is rammed with piles for three fathom in breadth, with long trunks of fir trees, two fathoms and a half in length. Theſe piles were driven during the winter by engines placed on the ice, and in the ſummer ſawn deep under the ſurface of the water, by machines contrived for that purpoſe. This done, the foundation was laid, firſt by filling the interſtices of the piles with flints and pebbles, then placing upon this ſolid baſis ſeveral layers of flat pudoſſkoi pliets, a hard kind of ſtone ſo called, conſolidated together by a tried cement, which was then built upon with ſquares of granite of

1½ to

1½ to 2½ foot thick, and the wall finiſhed above as a foot pavement a fathom broad, covered with ſimilar quadrats, at the height of 10 feet above the water. The parapet is alſo of the ſame hewn granite, two feet and a half high, and one foot and a quarter in thickneſs. At certain diſtances openings are made in the quay for deſcending upon the ice in winter, and ſtairs with ſpacious landing-places and benches, for taking up water, unloading the barks, and for the repoſe and convenience of thoſe who walk here for buſineſs or pleaſure. Laſtly, the face of the wall is furniſhed with maſſy iron rings, for the faſtening of galliots, barks, barges, and other veſſels. This truly imperial quay is, for its length, which, deducting the ſpace before the admiralty, is 1650 fathom, or 3 verſts, for ſtrength, magnificence, and the coſt of building it, unequalled in Europe, and the conſtant ſubject of admiration to foreigners. — In the gulf of Cronſtadt, juſt facing the mouth of the Neva, near the ſouthern ſhore, lie two low marſhy iſlands, with bruſhwood upon them, of which the greater is called Dolgoi oſtrof, or Long-iſland, where a conſiderable fiſhery is carried on. — Beſides theſe ſeveral ſtreams, there is another canal within the town, lined with brickwork and maſonry, ſurrounding the admiralty; likewiſe

ſome ſhort canals with wooden ſides, which, running between the Neva and the Moika, part the galley wharf and New Holland. — The LIGOVA canal, 20 verſts long, has its water from the Duderhof hills, with which it ſupplies the fountains of the empreſs's ſummer gardens, diſtributing it alſo to the gardens of the late prince Potemkin, and at the ſame time ſupplying that quarter of the city with water.

The water of the Neva, and its ſeveral arms and running canals, which, beſides the Ligova canal, ſupplies the whole city, is to be ranked with the lighteſt, cleareſt, and pureſt of river waters. Foreigners, indeed, for the firſt month or two of their ſtay at St. Peterſburg, perceive a certain alteration in their habit of body, becoming more lax than uſual, which has chiefly been laid to the charge of the neva water. This induced Model, and afterwards Georgi, both profeſſors of the imperial academy, to ſubmit it to a chemical proceſs: when the former found, in 80 medicinal pounds of the water, taken above the city, only 68 grains of calcareous earth and 3 grains of vegetable extract; and the latter, in 50 pounds of water, taken within the city, no more than 40 grains of calcareous earth, and 5 grains of extract; he found it alſo very poor in air. The accident to foreigners ſeems, therefore,

fore, to be more owing to the change in their way of living and other cauſes, than to proceed from the water of the Neva, which amply compenſates the want of wells and ſprings to the city.

In ſtill weather, the level of the water in the ſeveral outlets varies about 2 feet; ſtrong and continued eaſt winds drive the water quicker into the gulf, and accordingly it is 3 or 4 feet lower than the mean height. On the contrary, ſtrong, laſting weſt winds ſo greatly reſtrain the current, that the river riſes about as much above its mean height. In continued ſtorms from the weſt, it riſes in the arms, meaſured at the fortreſs, 5, 10, 15, and more feet. At 5 feet it overflows only the ſhores without buttreſſes in the weſtern quarter of the town; at 10 feet and upwards of increaſed elevation, only the eaſtern part of the town remains not overflowed. This has frequently happened; but, by good luck, the inundations hitherto have always laſted but a very ſhort time, generally but a few hours; and, by reaſon of the progreſſive heightening of the parts built upon, by the rubbiſh of old, and the materials of new erections, by digging canals, &c. they become more rare and leſs injurious.

Some thouſands of ſhips and barks annually paſs and repaſs the Neva, either coming from the inland parts of the empire, or from foreign

countries acroſs the ſeas, bringing commodities and proviſions to the amount of ſeveral millions of rubles, to St. Peterſburg. — This river receives in its courſe the Ijora and the Toſna.

Rivers that fall into the White-ſea.

The DVINA. This river is called by the Ruſſians ſievernaia Dvina, the northern Dvina; which name it firſt aſſumes on its junction with the two rivers the Sookhona and the Youga, which ariſe in the government of Vologda. This junction is formed at the city of Uſtiug, whence the Dvina takes a north-weſtward courſe; and at Archangel falls into the White-ſea, after having divided itſelf into two conſiderable arms. In its courſe it takes in ſome pretty large rivers, and ſeveral leſſer ſtreams, ſuch as, on the right, the Luſa, the Vichegda, and the Pinega; and to the left, the Vaga, the Yemza, &c. Oppoſite to the mouth of the Pinega ſtands the antient city Kholmogor. The merchant-veſſels run into the eaſtern arm of the Dvina, on which the fort Novaia Dvinka is built; but at firſt the weſtern, where ſtands the monaſtery Korelſkoi monaſtir, was the moſt frequented. This however is now no longer paſſable. In general the ſhoals increaſe from year to year in both, and ſuch large ſhips cannot now run in as formerly. The Dvina has

has the honour of having given reception in 1553, to the firſt engliſh ſhip that ever came to Ruſſia. To conclude, it flows moſtly through a ſwampy and woody region, is navigable from Uſtiug, and is tolerably abundant in fiſh.

The KULOI, and the MESEN. Both flow eaſtward of the Dvina, into the White-ſea, not far from each other, in the diſtrict of the town of Meſenſk. The former takes its riſe in the government of Archangel; the latter in that of Vologda. In their not very extenſive courſe they admit the waters of ſeveral ſmaller rivers.

Rivers that fall into the Frozen ocean.

All theſe rivers have a very perceptible ebb and flow.

The PETSHORA, called alſo Bolſhaia, or great Petſhora; to diſtinguiſh it from the Viſhera, which the Siryanes call Peſhorya, whence originates the name Petſhora. The Petſhora takes its riſe in the weſtern ſide of the Ural-mountains in the government of Vologda, follows a north-weſt courſe, and falls into the Frozen ocean, in the government of Archangel, after dividing into ſeveral powerful arms. It now flows through a low, foreſty, and almoſt uninhabited country. At firſt, when Siberia was conquered, the way

thither was generally by the Petſhora. They ſailed up the Dvina, the Vichegda, and the Vim, then went a ſhort ſpace by land to the Petſhora, then up that river, and by land over the Ural-mountains, to the Soſva, from this into the Oby, from the Oby into the Irtiſh, from the Irtiſh into the Ket; and from the Ket into the Yeniſſey, &c.

The OBY. This originates properly in the chineſe Soongoria, from whence it iſſues in a copious ſtream, under the name of Tſhuliſhman; and, in 52 deg. north lat. and 103° 30′ longit. falls into the lake Teletzkoe, in the ruſſian territory. From this lake, which is called by the Tartars Altinkul, it flows out again under the appellation of the By, not taking that of Oby till its junction with the Katunya. Of all the rivers of the ruſſian empire it is eſteemed the largeſt. In its upper regions it has a ſtrong current and ſeveral cataracts, but particularly a great number of iſlands, moſtly in the circle of Beroſof. At 67 deg. north lat. and 86° longit. it empties itſelf into the gulf of the ſame name, which unites it with the Frozen ocean in 73 deg. 50 min. north lat. and 90 deg. of longit. The principal rivers taken up in its courſe by the Oby, are, to the left: the Katunya, the Tſharyſh, the Alei, the Irtiſh, the Conda, and the Soſva; to the

right,

right, the Tſhumyſh, the Tom, the Tſhulym, the Ket, and the Voch. Up as far as the mouth of the Ket, the Oby has moſtly high and rocky ſhores; but farther on, quite to its entrance into the Frozen ocean, it, generally ſpeaking, flows over a clayey, ſandy, and marly bed. It is navigable till very near up to the Teletzkoe ozero, uncommonly prolific in fiſh, and in many places is accompanied by foreſts of large pine and birch trees. The courſe of this river extends about 3000 verſts. Of its collateral rivers,

1. The IRTISH is the moſt conſiderable. It riſes likewiſe in the chineſe Soongoria; flows through the lake Norſaiſan, in north lat. 46 deg. 30 min. then enters the ruſſian territory, and, after meandering through a large tract of country, throws itſelf in 61 north lat. and 86 longit. into the Oby. In its way it takes up the following rivers; to the right, the Buchtorma, the Ulba, the Uba, the Om, which is of a clear but black-looking water, and the Tara, all of which again take in a multitude of ſmaller rivers and ſtreams; to the left, the Ablaket, the Dſargurban, the Iſhin, the Vagai, the Tobol, and the Konda. The Irtiſh forms ſeveral iſlands, whereof ſome diſappear at times, and their places are ſupplied by others; even its courſe is very variable, ſo that it is often navigable in a place where it

was not before, and vice verſa. Its water in the inferior regions is whitiſh and light, whence it ſhould ſeem that it flows over a bottom moſtly of calcareous marl. It ſwarms with fiſh, and its ſturgeon are of a flavour particularly delicate.

2. The TOBOL takes its riſe 52 deg. 30 min. north lat. and 81 deg. longit. in the country of the Kirghiſtzi, in the chain of mountains that parts it from the government of Ufa. It pours itſelf into the Irtiſh, at Tobolſk, after running a courſe of about 500 verſts, during which it takes in the following rivers: the Ui, the Iſet, the Tura, and the Tavda, which all fall into it on the left. Of theſe the Tura is the largeſt; it riſes near Verkhoturia in the Ural-mountains, in about 59 deg. north lat. and glides into the Tobol, in 57 deg. 30 min. after having taken up the rivers Salda, Tegil, Pyſhma, Nitza, &c. into which laſt mentioned, the Neiva, the Ætſh, and the Irbit flow. By this acceſſion of waters the Tura becomes a conſiderable river, not much inferior to the Tobol itſelf. — The Iſet is likewiſe a river of ſome conſequence. It riſes out of a lake 2 verſts from Ekatarinenburg; and, after having taken up ſeveral rivers, as, the Siſert, the Sinava, the Tſetſha, and the Miæs, falls into the Tobol, in 57 deg. north lat. — The Tobol has moſtly low

ſhores;

ſhores; and in the ſpring ſeaſon frequently ſheds its waters far around.

3. The YENISSEY, which the Tartars and Mongoles who inhabit the ſuperior regions of it, above the Tunguſka, call it Kem, and the Oſtiaks, Gub or Kheſes, which ſignifies the Great river, is at firſt compoſed of two rivers, the Kamſara and the Veikem, originating in the chineſe Soongoria (or Bukharia) and form a conjunction in 51 deg. 30 min. north lat. and 111 of longit. About the mouth of the Bom-Kemtſhyug it enters on ruſſian ground, and hence firſt takes the name of Yeniſſey. After various windings it now tends northward; and, in 70 deg. north lat. and 103° 30′ longit. forms a bay containing ſeveral iſlands; and at laſt, in 3 deg. 30 min. of length, falls into the Frozen ocean. In autumn, when its water is at the loweſt, its breadth, e. gr. at the town of Yeniſſeiſk, is about 570 fathom, whereas in the ſpring it is 795 fathom and upwards. The coaſts of the Frozen ocean, between the mouths of the Yeniſſey and the Oby, are called the Yuratzkoi ſhore. The more conſiderable ſtreams taken up by the Yeniſſey, are the following: on the right, the Uſs, the Tuban, the Kan, and the three Tunguſkis, that is, the upper, the middle or podkammenaia, and the lower Tunguſka. On the

the left: the Abakan, the Yelovi, and the Turukhan. The Yeniſſey, in its ſuperior regions, flows over a very ſtony bed; and its ſhores, particularly the eaſtern, are moſtly beſet with lofty mountains and rocks. It has in general a very rapid courſe, though near its mouth it flows ſo gently that the current is hardly to be perceived at all. In the neighbourhood of Turukanſk and elſewhere it forms ſome conſiderable iſlands; and between the cities of Yeniſſeiſk and Kraſnoyarſk, ſeveral cataracts are to be ſeen. The Yeniſſey is navigable from its mouth as far as Abakan, and yields great quantities of the beſt fiſh. Of all the rivers taken up by the Yeniſſey,

The Tunguskis are the moſt conſiderable. The upper Tunguſka ariſes out of the Baikal, and bears the name of Angara till its union with the Ilim. Beſides that, it takes up ſeveral other rivers, as, the Koda, the Tſhadovetch, the Iriki, the Kamenka, the Olenka, and the Tatarſkaia, all on the right: to the left, the Oka, and the Tſhuna or Uda. This Tunguſka has moſtly a ſtony bed, ſtrewed with rocks; with ſeveral cataracts, five of which are very conſiderable. Though navigable the whole ſummer through, it muſt yet be confeſſed, that this navigation is toilſome and difficult. — The middle Tunguſka takes its riſe in the government of Irkutſk,

among

among the Baikal-mountains, not far from the origin of the Lena; and, after a courſe of about 800 verſts, and after having, on the right, taken up the Tſhiucha and the Tſhorna, falls into the Yeniſſey in 62 deg. north lat. — The lower Tunguſka takes it ſource, indeed, in the ſame diſtrict, but bends its courſe northward; and after having taken up on the left, the rivers Niepa, Svetlaia, with many others; and on the right, the Roſmaknika, the Turiga and the Gorela, and run a courſe of about 1500 verſts, ſtrikes into the Yeniſſey, not far from Turukanſk. Near the Turukanſkoi-Troitzkoi-monaſtir, are ſeveral dangerous whirlpools in it.

4. The KHATANGA. It ariſes out of a lake in the government of Tobolſk, in about 68 deg. north lat. and 110 longit., and in 120 longit, ruſhes into a large bay of the Frozen ocean, called Khatanſkaia guba. This river takes its courſe for the moſt part through a low and very marſhy country. The moſt conſiderable rivers taken up by the Khatanga, are the Kheta and the Potigan.

5. The LENA. This is the greateſt river of eaſtern Siberia. It takes it origin on the north-weſtern ſide of the Baikal from a moraſs, runs at firſt weſtwards, then to the ſouth, then again to the diſtrict of Yakutſk eaſtwards, and laſtly towards

towards the north, where after having divided itſelf into five great branches at its mouth, and thereby formed four conſiderable iſlands, flows into the Frozen ocean. Its courſe is computed to be 5000 verſts. Its ſource is in 52 deg. 30 min. north lat. its mouth in 73 deg. lat. and the eaſtern arm in 153, and the weſtern in 143 deg. of longit. The Lena has in general a very gentle current. The bottom is moſtly ſandy, and the ſhore only in the upper regions beſet with hills and cliffs. It takes in a multitude of ſmaller rivers; the moſt conſiderable of which are, to the left: the Manſurka, the Ilga, the Kuta, the Inæ, the Vilvi, and the Muna: to the right, the Kireng, the Vitim, the Patoma, the Olekma, and the Aldan, into which again ſeveral brooks tranſmit their waters. But of all theſe the largeſt are, the Vitim, the Olekma, the Vilvi, and the Aldan. Out of the Lena travellers paſs into the Aldan, from that into the Maia, and from the Maia into the Yudoma, from which they have but a ſhort route to make by land, to Okhotſk.

6. The YANA. It takes its origin in about 64 deg. north. lat. out of a little lake, directs its courſe, with ſome ſmall turns, towards the north, and previous to its diſcharging itſelf into the Frozen ocean, forms five conſiderable arms, which

which iſſue in a capacious bay. No large river, but a great many ſmall ſtreams flow into the Yana.

7. The INDIGIRKA ariſes in nearly the ſame latitude as the Yana, in the Stanovoi-Krebet, is reinforced by the Amekon, and a multitude of ſmaller rivers; and falls, in four great arms, into the Frozen ocean.

8. The KOLYMA, or KOVYMA, ariſes alſo in the Stanovoi-Krebet, almoſt over againſt Okhotſk; is much invigorated by the waters of numerous rivers, particularly the Omolon, forms a multitude of iſlands, and by means of four broad arms flows into the Frozen ocean.

Rivers that flow into the eaſtern or Pacific ocean.

The ANADYR. This ariſes in the country of Tchuktchi, out of a lake among the frontier mountains which are a continuation of Stanovoi-Krebet, here called Yablonoi-Krebet; and is therefore to be diſtinguiſhed from the nertſhinſkoi chain of mountains which alſo bears the name of Yablonoi-Krebet. The former has its appellation from the brook Yablona, which is the firſt conſiderable ſtream that runs into the Anadyr, on the right. Indeed it admits a great many other ſtreams on either ſide; but they are none of them very large. The bed of the Anadyr is in general ſandy, and its current is

by

by no means rapid; its channel is very broad, and contains a good number of isles, but throughout of so little depth, that it can scarcely be crossed in any part with the common ferry-boats of that country, called shitiki, which have no iron in their construction, being only sewed together, and drawing no more than two foot water. Only at the going off of the ice is the stream of any tolerable depth, from the mouth of the Krasnaia to the place of its exit. From the source of the Anadyr to the brook Yablona, not a wood is to be seen, but pure barren mountains; below the Yablona are some stripes of meadow-land and some poplar trees; and on the mountains to the left, for about 100 versts above Anadyrskoi-ostrog, are thin woods of larch trees and dwarfish siberian cedars *. The whole of the northern region as far as the Anadyr, is in general destitute of standard trees, and has scarcely any pieces fit for pasture; whereas south of the river, at no great distance, especially about the head of the main, the Penshina and the Aklan, are tall timber forests in abundance. From the Anadyr quite to the Kolyma and the Frozen ocean, and throughout the whole country of the Tchuktchi, no more forest has been discovered; nay, in this last country, the mea-

* Slanetz.

dow-

dow-ſhrubs ſcarcely ſhoot above a ſpan high; as in the whole tract along the northern coaſt of Siberia. But ſo much the more frequent are the flats, overgrown with yellow and white moſs, on which innumerable herds of wild reindeer find paſture.

The KAMTSHATKA, on the peninſula of that name. It riſes in the ſouthern half of it, takes its courſe northwards, but turns weſtward, and falls below Niſhnei-Kamtſhatſkoi, into the ocean.

The AMOOR. It is formed of the two rivers, the Argoon and the Shilka, and firſt takes this name on their conjunction, and therefore firſt on the chineſe territory. The Shilka takes its ſource in the high frontier mountains, runs with them through the nertſhinſkoi diſtrict, and on the left takes up the Ingoda, with ſeveral other rivulets. The Argoon ariſes out of a lake juſt upon the frontiers that part Ruſſia from China, and forms the border all the way to its exit in the Shilka.

Rivers that fall into the Caſpian.

The YEMBA or EMBA. It takes its riſe in the ſouthernmoſt part of the Ural-mountains, and conſtitutes the border between the uſimſkoi government and the country of the Kirghiſtzi, though the forts are much more to the weſt, namely on

the river Ural. The Yemba takes up only one river of any note, the Sagiſs, has a ſtrong current, but is at the ſame time very ſhallow. It is the moſt eaſtward of all the rivers that fall into the Caſpian.

The URAL (formerly the YAIK) has its ſource in the weſtern ſides of the Ural-mountains, breaking out of them near the fort of Orſk, for a long tract takes its courſe weſtward, but from thence runs directly ſouth, and, at about 47 deg. north lat. and 70 deg. longit. falls into the Caſpian. It is a large river of a rapid current, and pure water, known to the antients under the name of Rhymnus. Its courſe is computed at 3000 verſts. It has formed from times immemorial the limits between the Kirghiſtzi and the Baſhkirtzi; and ſtill there are upon it 30 forts and ſeveral forepoſts, againſt the former. The moſt conſiderable rivers taken up by the Ural, are, to the left, the Or and the Ilek; and to the right, the Kiſil, and the Sakmara. Its banks, in the upper regions, are ridged with ſteep and lofty rocks: but lower down it flows through a tolerably dry and very ſaline ſteppe. It is peculiarly abundant in fiſh.

The VOLGA, one of the moſt famous rivers of Europe. By the writers of antiquity it is ſome-

times named Rha, and ſometimes Araxis, by the Tartars Idel, Adal, or Edel, (denoting plenty,) and by the Mordvines is ſtill called Rhau. It takes its ſource in the government of Tver, in the Valday frontier mountains, from ſeveral lakes, flows thence through that and the governments of Yaroſlaf, Koſtroma, Niſhney-Novgorod, Kaſan, Simbirſk, Saratof, and Caucaſus, and falls near Aſtrakhan into the Caſpian, after having parted into almoſt 70 arms, and thereby formed a multitude of iſlands. It is reckoned to travel in its courſe above 4000 verſts. It is well known to be an old project of uniting the Volga with the Don, in order to be able, by means of this water-communication, to ſail from the Baltic and the Caſpian into the Euxine. Seleucus Nicanor, after him Selim II. and laſtly Peter the great, attempted the execution of it, and, in all appearance were prevented from ſucceeding, certainly not by the impracticability of the matter, but by other circumſtances. It is thought that this junction, by means of a canal in the diſtrict of Tzaritzin, where the Don runs at the diſtance of only 50 verſts from the Volga, would be more eaſily effected than by the propoſed Kamiſhenka. — On the ſhores of the Volga are a number of very reſpectable cities and towns, as, Tver, Uglitſh, Romanof, Yaroſlaf, Koſtroma,

ſtroma, Balochna, Niſhney-Novgorod, Kuſmodemianſk, Tſhebakſar, Kaſan, Simbirſk, Siſran, Saratof, Tzaritzin, and Aſtrakhan. It rolls its waters through many fertile regions, and in its inferior courſe is accompanied by beautiful foreſts of oak. In the ſpring it violently overflows, and is then navigable where at other times it is not. However, the chief navigation of it begins already at Tver. The Volga poſſeſſes this material advantage, that it has no cataracts, nor any otherwiſe dangerous places; but it is continually growing ſhallower from time to time, ſo as to give grounds for apprehenſion that it may one day be no longer navigable for veſſels of any tolerable ſize. At the commencement of the preſent century, the ſiberian ſalt-ſhips might ſtill be loaded with 130,000 or 140,000 poods of that article, and ſo be brought to Niſhney-Novgorod: at preſent they can take in no more than from 70,000 to 90,000 pood. In fiſh it is extremely plentiful, eſpecially in ſterlet, ſturgeon, biela reba, &c. — The Volga, in its extenſive courſe takes in a great number of rivers and brooks; the principal of which are:

1. The KAMMA. It is the largeſt of all the rivers that unite their ſtreams with the Volga, and at its mouth is almoſt larger than it. The Kamma riſes in the government of Perme, from the

the weſtern projections of the Ural-chain, nearly in the ſame region with it, waters a ſmall part of the government of Viatka, flows through a large tract of the government of Perme, forms the border between the governments of Viatka and Ufa; and, at Laiſheva, 60 verſts below Kaſan, falls into the Volga. In its courſe it runs over a ſpace of 1000 verſts. By the Tartars it is called Tſholman-Idel. For the tranſport of ſalt and iron from Siberia, it is one of the moſt important rivers of the empire. This is chiefly effected by the Tchuſſovaia and the Belaia, two rivers of conſiderable magnitude, flowing into it on the left. Beſide theſe, the Kamma takes up a great number of other rivers, ſuch as, on the left, the Kolva, the Yaiva, the Koſva, and the Ik; on the right, the Obva, the Okhan, and the Umyak. The Kamma, above the mouth of the Belaia, (which is of a whitiſh water,) has a blackiſh, wholeſome water. It is moſtly attended by a ridge of mountains, conſiſting of ſand, gypſum, and marl, with foreſts of firs and oaks. It is tolerably well ſtored with fiſh; and they are reckoned better taſted than thoſe of the Volga.

2. The OKKA. This ariſes in the government of Orel, irrigating that, and the governments of Kaluga, Tula, Moſco, Reſan, Tambof, Vladimir,

and Niſhney-Novgorod, then falls, at the city of the laſt mentioned name, into the Volga. It is a very conſiderable river, navigable to its upper regions, takes up a multitude of ſmaller ſtreams, and thus effects an excellent communication between moſt of the inland governments of the empire. It receives, on its left, the Ugra, the Moſkva, and the Kliaſma; and on its right, the Upa, the Oſetr, and the Mokſha.

The TEREK. It originates in the caucaſian mountains, runs at firſt towards the weſt and ſouth, but turns afterwards entirely to the eaſt; and, in about 44 deg. north lat. and 65 longit. falls into the Caſpian. Together with a great number of little mountain-brooks, it takes up, among others, the Bakſan, the Malka, and the Soonſha. — Its ſource lies properly in the ſnow-mountains of Caucaſus, on the higheſt partition-ridges of the frontiers of Georgia. Its courſe is rapid; and, in the months of July and Auguſt, when the melted ſnows ruſh down in torrents from the mountains into the plain beneath, ſwells to the height of 8 or 10 feet above its uſual level in autumn, winter, and ſpring. It then overflows its banks in many places, and lays the adjacent country under water; making itſelf in different parts new beds, and choaking up the old with ſand. In its inferior courſe, as far

as

as Kiſſliar, it is almoſt entirely unaccompanied by woods; farther up, to Starogladka, by a few; and thence upwards, its banks are richly garniſhed with foreſts, particularly of oaks, wild-fruit trees, and a variety of others. It does not freeze over every year, though in winter it is full of driving ice. In this ſeaſon its water is tolerably clear, which, at other times, above Kiſſliar, is turbid with earthy particles; but, when taken up, it ſoon grows clear, and is then bright, well-taſted, and of good quality. Below Kiſſliar, the river has a far leſs fall, and divides into ſeveral arms, in which the parted ſtream ſo gently flows, that it has time to depoſe its earthy particles, whereby theſe arms are alternately filling up; ſo that now one, and then another, repreſents the main river. In the lower regions, on the ſhores of the Terek are ſeen vineyards, mulberry and other fruit-trees, to which ſucceed ſalt-lakes, and ſprings of the ſame nature. Its bed is moſtly of ſand and clay. In fiſh, the Terek, as well as all its collateral rivers, is poor. Yet there are caught in it ſturgeon *, beluga †, ſevruga ‡, ſalmon in plenty, fat-fiſh §, carp, barbel ||, ſhad, pike, ſudak ♂, pearch θ, leſchtſch ξ, fiſh-otters, beavers, tortoiſes, &c.

* Acipenſer ſturio. † Acipenſer huſo. ‡ Acipenſer ſtellatus, Pall. § Cyprinus chalcoides. || Cyprinus barbus. ♂ Lucio perca. θ Perca fluviatilis. ξ Cyprinus barba.

Rivers that fall into the Euxine.

The KUBAN, or the HYPANIS of the antients. It riſes in the caucaſean mountains, and is formed by the confluence of a number of ſmall rivers. With the river Tumeſek, it makes ſeveral iſlands between the Palus Mæotis and the Euxine, of which one of the fineſt is the iſle of Taman; a principal arm of it falls northward into the former, and the other ſouthward into the Euxine. The river in general, and the firſt arm in particular, has a rapid courſe and clear water. But that arm which falls into the Euxine, flows in a very gentle current, has a troubled water, and forms at its mouth a pretty ſpacious bay, which however is ſo ſhallow that it can never ſerve as a haven. On the other hand the iſle of Taman has an excellent haven at Phanagoria. The Kuban has neither rocks nor water-falls, and therefore is well adapted to navigation with veſſels that do not draw much water. It admits to the right, the rivers Barakla and Barſukta; and to the left, the Yaſſik, the Yaſſi, the Urp, the Sagraſſa, the Laba, the Karabokan, and ſeveral other ſmall rivers that flow into it from the mountains. In the mountainous part of the country watered by it, its banks are very ſteep; but in the lower regions they are flat, where the country is one continued ſteppe, almoſt entirely

deſtitute

deſtitute of wood, but in other reſpects fertile enough. The iſle of Taman particularly poſſeſſes an excellent, and in ſome diſtricts an ever-verdant ſoil. The mountains in the ſuperior regions of the Kuban are thickly ſtrewn with foreſts. In its neighbourhood alſo, namely at Atſhuel, is a fine lake of ſalt water.

The DON, or, as it was called by the antients, the TANAIS, is the ſecond chief river which falls into the Palus Mæotis, and by it into the Euxine. It originates in the government of Rezan, from the Ivanofſkoe lake, and, after a courſe of about 1000 verſts, falls into the ſea near Azof. It flows for the moſt part over a flat country, covered with flowers and foreſts. The foreſts, conſiſting moſtly of pines and oaks, accompany it quite to the circaſſian mountains. Its bed has neither rocks nor large ſtones, but is formed generally of ſand, marl, and lime; for which reaſon it flows very gently, and here and there has broad ſand-banks and ſmall iſlands. It is liable to violent inundations. Its water is turbid and whitiſh; and is ſaid to be not wholeſome to every conſtitution. It indeed abounds in fiſh; yet in this regard is not to be compared with the Volga. Below Volonetz the Don commonly freezes about November; and February has ſcarce begun before the ice goes off. This river

is, therefore, from its magnitude and other qualities, of the utmoſt importance to the trade of theſe parts; it flows through the governments of Rezan, Tambof, Voronetz, and Ekatarinoſlaf. Among the principal rivers taken up by the Don, are: the Voronetz, the Khoper, the Donetz, and the Manitſh.

1. Of theſe the DONETZ is the moſt conſiderable. It takes its riſe in the government of Kurſk, flowing as far as Caucaſus through a fertile and very populous country. It is navigable from the Iſum, and has nearly the ſame water and the ſame kinds of fiſh with the Don.

2. The VORONETZ has its origin in the government of Tambof; in a fruitful region furniſhed with beautiful foreſts of oak. Its banks are well inhabited, and copiouſly ſtrewn with towns and villages. By means of a canal that unites two petty rivers that run into the Voronetz and the Okka, one may ſail in ſmall barks from the Voronetz into the Okka, ſo that the Volga is thus in a manner connected with the Don; but, not to mention that this paſſage can only be effected in little barks, the vaſt circuitous way that muſt be taken up the Volga, in order to come into the Don, defeats the benefit that might otherwiſe be derived from it. — Not far below the city of Voronetz, we ſee the dock-

dock-yards at Tavrof on the Don eſtabliſhed by Peter I. in the year 1708, where large ſhips are conſtructed for the navigation of the Euxine.

The DNIEPR, or the BORYSTHENES of the antient geographers, ariſes in the government of Smolenſk, not far from the diſtrict where the Duna and the Volga take their ſource. This large river directs its courſe ſouthwards to the Euxine; and, after having formed the Liman, a marſhy lake about 60 verſts in length and 10 in breadth, falls into the Euxine near Otchakof and Kinburn. Beſides traverſing the government of Smolenſk, it runs through the provinces of Mohilef, Tchernigof, Kief, and Ekatarinoſlaf, and forms the boundary between three of them and Poland. The Dniepr purſues a courſe of about 1500 verſts, chiefly through the moſt fertile provinces and the moſt genial climates of the empire. At Smolenſk it uſually freezes in November, at Krementſhuk in December, and at Kief in January; and in the laſt-mentioned region, breaks up about the beginning of March. It is broader, deeper, and more rapid than the Don; has a number of iſlands, a bed partly ſandy and ſtony, and partly of marl; and, though a calcareous, yet a ſalubrious water. At Kief there is a large bridge of boats thrown over it, of 1638 feet, or 546 fathom

fathom in length, and in many places has very commodious ferries. To the above-mentioned city, from Smolenſk, it is navigable, in perfect ſafety; but below it, at a diſtance of 60 verſts from the influx of the Sura, down to Alexandroffkaia, are thirteen cataracts in regular ſucceſſion, which are cauſed by a multitude of banks and blocks of granite projecting into the river; nevertheleſs, at very high water, it may be navigated with empty barks, above it, the cargoes whereof muſt be ſhipped again in other veſſels at 70 verſts ſtill lower down. From theſe water-falls to its mouth, the diſtance is about 400 verſts, where it may be paſſed in all parts without the ſmalleſt danger. Its mouth is in many places deep enough, and might be made commodious for ſhipping. As far as Kief it is accompanied by thick foreſts; but below that city, its ſhores are moſtly bare, or, eſpecially in the upper regions, beſet with hills and mountains. Laſtly, the Dniepr yields plenty of fiſh, particularly from its mouth, to Kherſon, and farther up. The Soſh, the Deſna, the Soola, the Pſiol, the Vorſkla, the Sammara, the Ingulatz, and ſeveral other waters, flow into it.

The Bogue. It riſes in Poland, parting that kingdom and a portion of european Turkey from Ruſſia; and, at Otchakof, falls into the

the Euxine. Among others, it takes up the Ingul, the Sinucha, and the Guiloi; and thus becomes a very conſiderable river.

Mineral waters.

It is indeed ſurpriſing that in this vaſt empire ſo proportionably few mineral ſprings ſhould have been hitherto found, if we except the ſalt-ſources and lakes, which do not belong to this place. In mineral ſubſtances there is certainly no deficiency in many parts; it muſt therefore ariſe from ſome other cauſe. Perhaps the great diſtance from the ſea. Hence it may likewiſe be, that in the inland parts of the country every trace of the old volcanos, that doubtleſs exiſted here ſome thouſand years ago, is effaced. — The mineral waters at preſent known, and occaſionally applied to medicinal uſe, are:

1. *Sulphureous* * *and liver-of-ſulphur* † *waters.*

(Hot ſprings.)

Theſe are the moſt numerous. Some are of luke-warm, others warm, and a few of hot water, viz.

* Sulphur-ſprings, which uſually afford hepatic air or ſulphurated hydrogene gas.

† Liver-of-ſulphur ſprings; i. e. ſprings which are impregnated with ſulphurate: they alſo afford hepatic air or ſulphurated hydrogene gas.

1. A fetid ſulphureous ſpring is in Sarepta on the Volga, in the bed of the mill-pond, and another near Saratof.

2. Another is near Selo Klintſchy in the government of Perme.

3. The like fetid water and mud are contained in many of the bitter lakes and other waters in Siberia; for inſtance, the lakes Karaulnoë and Gorkoë on the lines of Iſchim, the Puſtoy on the Kurtamyſh, and the ſtream Oſcha on the Baraba, which emits a great quantity of inflammable air.

4. The baths on the Terek in the caucaſean government. Theſe were already known to Peter the great, and were examined by his order in 1717 by Dr. Schober, but have been thoroughly explored only of late by the academician Guldenſtædt. The principal of theſe is the St. Peter's bath, formerly called the Baragunſchian; and next to this the St. Catherine's, the St. Paul's, and the St. Mary's baths. The mountains whence they iſſue conſiſt of ſandſtone and whetſtone. St. Peter's bath is formed by three ſeveral ſources pretty diſtant from each other. Their proper heat is 71 deg. of Reaumur's thermometer, let the temperature of the atmoſphere be as it may. The warmth of the other ſources riſes from 41 to 60 deg. All theſe waters, even the cold ones, are clear as cryſtal.

cryſtal. In taſte and ſmell they reſemble liver of ſulphur, which however they entirely loſe in 24 hours. M. Falk thinks their component parts, in a pound, conſiſt of 12 ounces and about 3 grains of Glauber's ſalt, 3 grains of calcareous earth, very little ſulphur diſſolved in mineral alkali, no iron, little æther, and a trace of alum: according to Guldenſtædt, however this water contains nothing more than ſulphur and alkaline ſalt, which, mixed, produce liver of ſulphur, no iron, but a conſiderable proportion of calcareous earth. — Beſides theſe there are other warm ſprings in theſe parts, as: the warm baths on the river Koyſſa, near Kiſliar, called St. Andrew's baths, and likewiſe proceed from ſandſtone; and the warm ſprings on the Podkumka, 30 verſts from the fort of St. George, iſſuing from mount Maſchuka. Their component parts are the ſame with the foregoing, only their warmth is perceptibly leſs. In regard to the medicinal virtues of theſe baths, it is aſſerted that their internal uſe is very beneficial, in the ſwelled neck or other ſcrofulous indurations of that kind, ſtricture of the breaſt, phthiſis ariſing from glandular obſtructions, in obſtructions of the liver, in the jaundice, in hypochondriacal affections, hæmorroids proceeding from obſtructions in the bowels; in fine to perſons who labour under a ſhortneſs of breath from indura-

tions or calculous ſubſtances or mucus in the lungs. The internal and external uſe of them is ſaid to be good in gravelly complaints attended with pains in the back and loins, and diſorders ariſing from a checked perſpiration; in ſhort, in all arthritic and rheumatic diſeaſes. The inward, but ſtill more the outward uſe of theſe baths are reckoned ſerviceable in diſtempers cauſed by an obſtinate acrimony of the blood, in ſcorbutic and cutarious eruptions. Bathing in them is preſcribed againſt ſtiffneſs of the joints, and contractions of the limbs, &c. The inward and outward uſe of them is alſo profitable in tonic and convulſive ſpaſms, as alſo in rickety complaints. This water cooled is found greatly to promote a diſcharge of urine. Taken daily with milk it is extremely beneficial in conſumptions. — Guldenſtædt, in the years 1771 and 1773 cured forty patients by means of theſe baths, and ſince that time the uſe of them is become pretty general in the country round. — In the baſins of theſe warm waters there is a depoſition of tophus and a ſmall portion of native ſulphur. In the vicinity of them are naphtha ſources *.

5. The baths on the Barguſin, in the province of Nertſchinſk in the government of Ir-

* For a more circumſtantial account of theſe waters ſee Falk, Beytrage, book ii. p. 13 & ſqq. and Guldenſtædt in hiſt. cal. 1778, and Peterſb. Journ. book ii. p. 134.

kutſk.

kutſk. They were found in a waſte region at the diſtance of 80 verſts from any habitations. But M. Grund, ſurgeon to a regiment quartered in thoſe parts, having ſucceſſively preſcribed the uſe of theſe baths to ſeveral patients; M. von Klitſchka, the governor of Irkutſk, in 1779 cauſed ſome buildings to be erected there. They have proved of great advantage to perſons afflicted with rheumatiſm, ſcurvy, phthiſis, and other complaints of a like nature. The water is drank either pure, or on account of its nauſeous taſte, reſembling that of rotten eggs, mixed with milk. It promotes perſpiration, does not quench the thirſt, and may be drank in large portions. When boiled it is of a very agreeable taſte, and is particularly good with tea *.

6. The warm ſprings in what was formerly the Soongarèy. Some of theſe are near the ruſſian borders. There are ſeveral of them, as, on the Araſchan, which river proceeds from the mountains, and falls into the lake Alakta; the ſpring guſhes from ſandſtone. 2. On the mountain-ſtream Yabliſchu, which flows into the Emil. 3. On the rivulet Lepſchy gliding from the mountains of Muſart, into the Tzuy; and, 4. high up the Irtiſh, which was frequently viſited by the late khan Kontaiſch †.

* St. Peterſb. Journal, 1779, book ii. p. 376.

† See Falk, Beytrage, book ii. p. 16.

7. The

7. The warm ſprings in the ruſſian part of the Altay-mountains. There are but very few of them: the moſt conſiderable are about the head of the Abakha. They have not, however, yet been examined.

8. The warm ſprings in the Sayane-mountains. I have heard of ſome in thoſe parts; but know nothing more of them.

9. The warm ſprings in the Baikal-mountains. They are for the moſt part highly ſulphureous, and the water of ſome of them is very hot, which in cutaneous diſorders is uſed with good effect*.

10. The warm ſprings at Kamtſhatka, and on the kurilly and aleutan iſlands, which have been ſpoken of before.

11. The ſulphureous ſprings on the Sok and on the Volga; for which the reader is referred back to the deſcription of the Ural-mountains.

2. *Vitriolic waters.*

(Sour-ſprings.)

Strong martial waters are not uncommon; but, of proper ſour waters which are applied to medicinal purpoſes, only the following are known:

1. St. Peter's well in the diſtrict of Olonetz, in the village of Buigova, where it trickles in a

* Georgi's travels, tom. i. p. 79. 93, &c.

valley.

valley. It was fitted up in 1716 by Peter the great, as well for his own uſe as that of the public, for which purpoſe ſeveral buildings are conſtructed about it, together with a church. The water has a vitriolic, inky taſte, and a ſulphureous ſmell. The well is 4 arſhines in depth, and 3½ in diameter, ſunk in a hollow full of roots of trees and weeds, (partly in their primitive ſtate, partly impregnated with ferruginous matter, or entirely converted into iron-ſtone,) interſperſed with ſtones, and 1½ arſhines in a clayey kind of ſtone with much ſulphur pyrites. In the deeper parts of this vale is a ſtratum of vitriolic earth, from which vitriol is here prepared *. This well has for many years paſt grown almoſt entirely out of uſe.

2. The well near Tzaritzin; at Sarepta in the government of Saratof. This is at preſent the moſt famous in the ruſſian empire, and the only one that may be ſaid to be frequented. It was diſcovered in 1775, by Dr. Vier†, paſtor of the community of moravian brethren at Sarepta. In

* A like mineral water where the vitriol ſpontaneouſly ariſing may be collected in poods at a time, lies at the diſtance of 17 verſts from Zurukhaitu in Dauria. Pallas, travels, iii. 425.

† As is generally ſuppoſed; but theſe ſprings had been before obſerved by Meſſrs. Falk and Pallas.

a circuit of 200 verſts, no leſs than 22 mineral ſprings have ſince been found. The largeſt and moſt copious lies 9 verſts to the north-weſt of Sarepta, 18 verſts from the town of Tzaritzin, and 3 verſts from the bank of the Volga, in 48 deg. 43 min. n. lat. The country round is very pleaſant, abounding in odoriferous herbs, in pure and pellucid ſources, in all kinds of fiſh, cattle, game, poultry, &c. Dr. Vier cauſed this ſpring to be incloſed, and at firſt prepared ſpring-ſalts and magneſia from the running water. The component parts are, in 12 ounces: 32 grains of bitter ſalt, 2½ grains of ſelenite, the ſame quantity of calcareous earth, and a ſtrong tincture of iron, with but little æther. The main ſpring is incloſed 7 feet high and 4 over. The water is commonly from 3 to 4 degrees of Reaumur warmer than common water. The taſte is not unpleaſant, clean, and rather ſaline. Near the well the air is ſomewhat cooler. The following properties are aſcribed to theſe ſprings: they promote the circulation of the juices, preſerve from putrefaction, brace and cheer, cleanſe the fluids from acrimony; and are good for wounds. The water is alſo an excellent laxative, promotes perſpiration, purifies the blood, abates inflammations of it, cures cramps and obſtinate colds. It has been computed that every hour 36,000 pounds

pounds of water flow from this ſpring, containing 180 pounds of mineral particles; in the whole year therefore 315,360,000 pounds of water and 1,576,800 pounds of mineral parts. In the year 1780, the perſons that uſed theſe waters, amounted to 122, and the number of the frequenters has been annually much increaſing ever ſince *.

3. A very good ſour-ſpring is alſo at the St. Peter's bath on the Terek. It ariſes quite cloſe to the hot-ſpring, and contains principally Glauber's ſalts, with a ſlight ferruginous tincture, and a ſmack of a volatile poignant acid †.

4. The ſprings near Ekatarinenburg in the government of Perme. They are juſt 2 verſts from the town, in the iron-works of Verchney-Iſetſk. Their component parts are a ſolution of iron by the atmoſpheric acid and ſome ſelenite; the taſte is very inky, and the effect detergent and decompoſing. The well has been lately made, and the waters are coming into general uſe.

5. A ſimilar ſource is likewiſe at the iron-works of Kuſchvinſk in the ſame government.

* For farther particulars, ſee St. Peterſb. Journ. parts ii. vi. and New Pet. Journ. 1782, book ii. p. 139.

† Falk, Beytr. book ii. ſect. 12.

It has the ſame qualities with the laſt mentioned, and is uſed in the hoſpital of the place with benefit.

6. A four-ſpring near Pogromna in Dauria, which greatly reſembles Seltzer water *.

7. Another of theſe four-ſprings is alſo in the iron-works at Kutomarſk in Dauria †.

3. *Bituminous waters.*

(Naphtha ſources.)

1. On the ſtream Igar, 15 verſts from Sergiefſk on the Samara, and others 40 verſts from it. They yield conſiderable quantities of naphtha.

2. On the Terek, in the mountains about the warm ſprings at Baragun, near Deulet-Gueray, &c. and the ſources of Tſchetſchengiſk are particularly prolific. There ariſes out of holes in the argillaceous and ſandſtone ſoil a watery vapour ſmelling of naphtha, which collected in pitchers is ſo richly impregnated with naphtha, but ſtill more with maltha, that the inhabitants take both and uſe the latter as tar. The earth hereabouts is all impregnated and black with maltha.

* Pallas, travels, part iii. p. 249.

† Georgi, part i. p. 344.

3. On

3. On the ſhore of the Volga near Tetyuſchy and near Samarſkoy, thick naphtha oozes out of the ſtony ſtratum.

4. On the mountain Irnek, on the kirghiſian and khivinſchian frontiers, on the road to Ornburg black naphtha flows. A lake on the Sagris which falls into the Emba, is covered for a finger-thick with naphtha.

5. On the Sok *.

6. On the Caſpian; principally near Baku.

7. In Taurida. In the diſtrict of Perekop and on the iſle of Taman, 20 verſts ſouth of the town of that name; alſo at Yenikaly and in the Kuban.

8. On the Baikal: in various places.

4. *Incruſtaceous waters.*

1. Which depoſe tophus calcareus, or foreign ſubſtances incruſted with calcareous particles, and alſo form ſtalactites. This kind of water is in great plenty, of which the tophus ſtrata on the Volga, the Kamma, the Terek, the ſtreams of the upper Sura, &c. and the many ſtalactites in the caverns of the Ural, the Altay, and other mountains are ſo many proofs; alſo a petrifying ſpring to the right of the Volga near Du-

* For which ſee before in the deſcription of the Ural-mountains.

vobka, which in 30 years ſtrongly impregnated a piece of timber with calcareous particles *.

2. Such as incruſtate ſubſtances laid in them with iron-ochre, or convert them entirely into iron-ore. Neither are theſe uncommon, for inſtance the above-mentioned four ſprings at Olonetz, a ſpring near Verchneturinſkoy-ſavod, one near Suſunſkoy-ſavod, and one in the region of the Schlangenberg †.

Canals.

THE conſtruction of canals was a principal object with Peter the great: ſome were even begun by his orders, but were afterwards left unfiniſhed from the difficulties that aroſe in the progreſs of the work. Four particularly derive their origin from him, viz. 1. that to Cronſtadt, which, after being carried upwards of two verſts, was then abandoned. 2. The Ladoga canal, which in length is 104 verſts, and 70 fathom in breadth. 3. A canal, along which, by means of ſome rivers, a communication is formed between Moſco and the Don. 4. That at Viſhnei-Volotſhok, by means of which a paſſage is had from the Caſpian into the Volga; and thence, in conjunction with ſome rivers and lakes, into the Neva, and ſo into the Baltic.

* Falk, ubi ſupra, p. 5.

† Hermann's Statiſtiſche ſchilderung von Ruſsland, &c.

The

The late empreſs, from the very beginning of her reign, beſtowed a peculiar attention to this important object, and actually cauſed three canals to be dug, beſides thoſe of Cronſtadt and St. Peterſburg; in order particularly to render far more commodious the paſſage from the Caſpian into the Baltic than it is by the canals of Viſhnei-Volotſhok; and then, by means of ſome rivers, to connect the Caſpian with the White-ſea. Several other plans have been propoſed; and, among others, one to unite the Dnieſtr, the Dniepr, and the Volga.

Many other canals might be undertaken, for connecting rivers of various magnitudes together, which would greatly facilitate the tranſport of products from one place to another, eſpecially to the ſea-ports. Only, in ſome regions the expence would be too great; or the advantage, at leaſt to them, would be beyond all proportion greater than the benefit to accrue from them. However, many canals might be cut highly favourable to trade where it has hitherto met with numberleſs impediments.

For inſtance, not more than two voloks * are to be met with between the Don and the Volga.

* A volok, in the ruſſian language, ſignifies a ſmall tract of land between any two rivers that run nearly in the ſame direction.

One is at Tzaritzin, where Peter the great had formed the deſign of making a canal of communication between theſe two rivers. The other volok is beyond Tſcherdine, between the Kolva and the Petſhora.

Almoſt all the rivers of Siberia diſembogue into the Frozen-ocean. Not one of all that take their riſe in Siberia, runs to the countries of the Mongoles, Bukharians, Kalmuks, and Tartars; whereas, many of thoſe which riſe in the Mongolèy, and the country of the Kalmuks, flow northward through Siberia. They are ſo commodious for navigation, that a veſſel might go from them through Peterſburg to Selenghinſk, were it not for only two voloks: one between the river Tſchuſſovaia and the Tagil, and the other between the Ket and the Yeniſſey; the latter of about 90 verſts, and the former not ſo wide.

VIEW

OF THE

RUSSIAN EMPIRE.

BOOK II.

HISTORICAL VIEW OF THE NATIONS OF THE RUSSIAN EMPIRE.

IN addition to the advantages derived from the natural ſituation of Ruſſia, Nature has been no leſs bountiful to her in the inexhauſtible ſources of her products of every ſpecies. As a ſyſtematical ſurvey of them would lead us beyond the bounds of our plan; and, even with the moſt ſtudied brevity, would only be a dry nomenclature, we ſhall here content ourſelves with remarking in general: that the ruſſian empire produces all the neceſſaries of life, and many of them in ſuch ſuperfluity, that, with a proportionate population and induſtry, ſhe might be not only completely independent in regard to her primary

primary requiſites, but alſo entertain the probable hope of keeping the generality of trading nations in a conſtant dependence on her. The profit, employment, and manufacture of theſe natural ſtores by mechanical arts and traffic will be expreſsly noticed in the progreſs of this work; we therefore paſs by theſe objects now, in order to give a completer knowledge of them, by briefly delineating the political diſtribution of the empire.

The whole ruſſian ſtate at preſent (1799) conſiſts of FIFTY alike-organized provinces, which are called governments or viceroyalties. As in this diſtribution leſs regard was had to the ſuperficial contents than to the population, ſo the areal dimenſions of the governments are generally various; while their population, with a few exceptions, is pretty equal. Each government is again divided into ſeveral circles; ſome of the largeſt have alſo a farther diſtribution into diſtricts. In each circle is a circle-town, where the circle-adminiſtration has its ſeat, and one of theſe circle-towns is at the ſame time the government-town, in which the governor-general and the principal officers reſide, and by which the whole government is uſually denominated.

Beſides theſe fifty governments, belonging to the ruſſian empire, are two more countries,

having a military-civil conſtitution, namely, the country of the Donſkoy-Kozaks, and the country of the Euxine-Kozaks. Two-and-fifty provinces therefore, properly ſpeaking, compoſe the ruſſian empire; the georgian ſtates Karduelia and Kakhetty, ſeveral petty diſtricts of people, in the parts of Caucaſus, with the country of the Kirghis-Kozaks, are to be reckoned among the countries under the protection and in the dependence of Ruſſia.

Great part of the country now called Ruſſia was in the period of remote antiquity inhabited towards the north-eaſt and north, by a people of Finniſh origin, perhaps deſcended from the antient Scythians. Towards the north-weſt, were tribes conſiſting of a motley race of Sauromates and grecian coloniſts; and from them are deſcended the modern Lithuanians, Lettovians, Livonians, and Courlanders; as were alſo the antient Pruſſians. The whole ſouthern part of Ruſſia, even to the Krimea, was for ſome time inhabited by Goths; and, between the Volga, the Don, and Mount Caucaſus, dwelled a nation deſcended from the Medes, called Sauromates, that is, the northern Medes. In proceſs of time, when nations of barbarians iſſued, one after the other, in ſwarms, from the eaſt, and ſome of the different tribes of Goths had, ſince the middle of the

the third century, penetrated into the weſtern regions of the roman empire; part of the Sauromates found themſelves under the neceſſity of retiring farther toward the north and the weſt. Even at that early period they had the ſame political conſtitution we ſtill ſee prevalent among them. Each individual of the nation was either maſter or ſlave. Thoſe who were of diſtinction among them, called themſelves tribes, ſlaf, and ſlavnè, or noblemen; whence again, all ſuch as either were renowned for great atchievements, or only capable of performing them, were afterwards in like manner ſtyled ſlavnè. Under this denomination it was that they became known to the Europeans, who were not till very lately acquainted with the particular tribes of thoſe nations. Theſe tribes had their appellation frequently from ſome river, town, or diſtrict. So the Polabes were named after the Laba, or Elbe; Po, in the ſlavonian and ruſſian tongues, ſignifying near. The Pomeranians dwelt po moru, or near the ſea. The Havellanians near the river Havel; the Maroaro, or Moravians, or Marahani, on the banks of the river Morava. The Varnabi had once their reſidence near the Varnof, and the Polotzani on the ſhores of the Polota. In the moun-

mountains * lived the Khrobates; the Tollenſians were named after the river Tollenſea, in Pomerania citerior, which empties itſelf into the Peene, near Demmin. From Sidin, or Sedin, the Stettin of the moderns, one tribe was named Sidinians; another from Britzen † Britzanians; from Kuſſin, a town ſubſiſting in thoſe early times, the Kiſſinians took their name, the traces of whom are ſtill to be found in a village near Roſtock, called Keſſen, or Kiſſin: and laſtly the Lutitzians were named after Loitz, on the river Peine. But there are alſo ſome names of theſe tribes which are original; for example, the Sorbs, or Serbs, the Tſchechs or Bohemians, the Lachs, Lechs, or Polachs, the Poles; and from the more modern Varagian Roſſi, the Ruſſians, about the year 862, received their name. The ſtorm, which, in the train of Attila, from the year 435 to 456, ſpread terror and devaſtation over the earth, was but of ſhort duration. In the mean time came the turkiſh tribes, which till then had dwelt in great Turkey ‡, and Turkiſtan (where is ſtill ſubſiſting, on the banks of the Taras, the town of Turkiſtan) and eſtabliſhed new empires. The empire of the Vlagi, or Volochi, or Vologars, or Volgars, or Bul-

* Khrebet. † Treunbritzen. ‡ *i. e.* Bukharia the leſs.

garians,

garians, is in like manner called Great Bulgaria. It is ſituated beyond the Volga, on the banks of the Kama, of the Bielaia and the Samara: the empire of Borkah or Ardu, of the aſconian Turks, extended on this ſide of the Volga from Uvieck, near Saratof, quite to mount Caucaſus. One part of theſe were called Kumani or Komani, from the river Kuma, and their town was named Kumager *.

SECTION I.

1. *Slavonians.* 2. *Finniſh nations.*

No other country throughout the globe contains ſuch a mixture and diverſity of inhabitants. Ruſſians and Tartars, Germans and Mongoles, Finns and Tunguſes, live here at immenſe diſtances, and in the moſt different climates, as fellow-citizens of one ſtate, amalgamated by their political conſtitution, but by bodily frame, language, religion, manners, and mode of life, diverſified to the moſt extraordinary contraſts. It is true, there are ſome european countries in which we find more than one nation living under

* For more on this ſubject, ſee the Hiſtory of Diſcoveries made in the North, tranſlated from the German of Dr. John Reinhold Forſter.

the

the ſame civil conſtitution, or where we ſtill perceive evident traces of the former difference between the primitive and modern inhabitants; but in almoſt all theſe countries the dominant nation has in a manner ſwallowed up the conquered people; and the individuality of the latter has, in the courſe of ſome centuries, by inſenſible degrees, been almoſt entirely loſt. Whereas in Ruſſia dwell not only ſome, but a whole multitude of diſtinct nations; each of them having its own language, though in ſome caſes debaſed and corrupted, yet generally ſufficient for generic claſſification; each retaining its religion and manners, though political regulations and a more extenſive commerce produce in ſome a greater uniformity; the generality of the main ſtems, in ſhort, bearing in their bodily ſtructure, and in the features of their faces, the diſtinctive impreſſion of their deſcent, which neither time nor commixture with other nations have been able entirely to efface.

This extraordinary variety of inhabitants, while it gives great attraction to the ſtudy of ruſſian ſtatiſtics, adds likewiſe to its difficulties. Inſtructive and intereſting as it is to the reflecting obſerver, to trace the human being through every degree of civilization, in the ſeveral claſſes of manners, and in all the forms of civil ſociety; yet toilſome and dry is the occupation which muſt

muſt neceſſarily precede that ſatisfaction: to inveſtigate the origin of theſe ſtems in their firſt ſhoots, and to diſcriminate their gradual progreſs to larger ſocieties and ſtates from the chaos of dark and fabulous times. The united efforts of the numerous inquiſitive hiſtorians, both foreign and domeſtic, who have employed themſelves on theſe ſubjects, have hitherto been able to caſt but a feeble light on the origin of the greater part of the nations of the ruſſian empire, and the reſearches of many of them have been loſt in traditions, the romantic obſcurity whereof has left us no hope of arriving at the truth. Without pretending to ſurmount theſe difficulties, on which hiſtorical ſagacity has hitherto been exerted without any remarkable benefit to the knowledge of nations, and the diſcuſſion of which would lead us too far beyond the bounds we have marked out to our plan, we will merely attempt to arrange the particular reſults of the moſt competent inquirers into a conſiſtent line which may guide us through the labyrinth of the intricate reports of the middle ages, and convey us into the more luminous regions of authentic hiſtory. — We will trace the exiſtence of each nation which we find within the limits of the ruſſian territory to its firſt hiſtorical appearance; and theſe efforts will enable us to ſketch out a genealogical ſyſtem of the nations that inhabit

that

that empire. Where hiſtory leaves us, we will ſeek in the analogy of languages means for the claſſification of collateral tribes, hoping thus to deduce as complete and regular a view as poſſible of all the nations of the ruſſian north, according to their real or probable derivation, their moſt remarkable events and cataſtrophies, their population and the place of their preſent abode *.

Beſides

* For the moſt eſtabliſhed and the moſt memorable facts from the antient hiſtory of the ruſſian nations, it is proper here at ſetting out to note the authorities which are chiefly uſed. Theſe are, beſides ſeveral ſcattered eſſays in larger works or periodical publications, principally the following: Plan of a topographical and phyſical deſcription of the ruſſian empire, undertaken by the imperial academy of ſciences; in the St. Peterſburg Journal, vol. vi. p. 323. Georgi's deſcription of all the nations of the ruſſian empire. Schlœtzer's general hiſtory of the north, or the 31ſt vol. of the german univerſal hiſtory. Pieces relating to ruſſian hiſtory, by her majeſty the empreſs Catharine II. Schlœtzer's diſſertations on the ruſſian annals (1). Diſſertation ſur les anciens Ruſſes, par Strube de Pyrmont. Kratkoie vedeniye v bytopiſſaniye vſeroſſ. imp (2). Thunmann's unterſuchungen ueber die alte geſchichte einiger nordiſchen vœlker. Yannaus pragmatiſche geſchichte von Liv. und Ehſtland. Muller's ſammlung ruſſiſcher geſchichte. Gat-

(1) Tranſlated in the Selections from foreign journals, &c. printed for Debrett, 1797, vol. ii. p. 293 & ſqq.

(2) By profeſſor Beſack.

Beſides the Slavonians, to whom the predominant nation belongs, there are in the ruſſian empire three main national ſtems, whoſe original identity is hiſtorically placed beyond all doubt, and among whom ſeveral other tribes are to be counted as relative or collateral branches, namely, Finns, Mongoles, and Tartars. To theſe may be added the Tunguſes; who, though not a primitive ſtock, yet are the only one of their race in Ruſſia. A ſixth claſs is formed by thoſe nations, with whoſe language and hiſtory we are ſtill too much unacquainted for being able with any degree of certainty to aſſign them a place in the national ſyſtem at large; and this claſſification is terminated by the diſperſed multitudes of european and aſiatic nations who have ſettled here and there in particular provinces: either as conquerors with violence, or voluntarily and on invitation as coloniſts: but their number is too inconſiderable for having any pretenſions to be treated of under a ſeparate head.

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terer's verſuch einer allgemeinen Veltgeſchichte. Thunmann's unterſuchungen ueber die geſchichte der œſtlichen europæiſchen vœlker. Peyſſonel's verfaſſung des handels auf dem ſchwartzen meer. Pallas ſammlung hiſtoriſcher nachrichten ueber die mongoliſchen vœlkerſchaften. Fiſcher's ſibiriſche geſchichte. The travels of the St. Peterſburg academicians, &c.

1. The

1. The SLAVONIAN ſtock is one of the moſt remarkable and moſt widely extended in the world. Next to the Arabians, who formerly prevailed from Malacca to Liſbon, there is no people throughout the globe who has diffuſed its language, its dominion and its colonies to ſo ſurpriſing an extent. From the ſhores of the Adriatic, northwards as far as the coaſt of the Frozen-ocean, and from the ſhores of the Baltic through the whole length of Europe and Aſia, as far as America and to the neighbourhood of Japan, we every where meet with ſlavonian nations, either dominant or dominated. — The origin of this numerous and powerful race is loſt in the night of antiquity; it was perhaps compriſed by the Greeks and Romans under the comprehenſive and indefinite denomination of Scythians and Sarmates *. Poland, Pruſſia, Lithuania, and the ſouthern parts of Ruſſia

* In the year 495, the Heruli, being routed by the Longobards, marched through the territories of the Sclavi; and this is the firſt event in which this nation is mentioned in hiſtory under that name. Indeed the name Sclavi appears in the armenian hiſtorian Moſes of Chorena, who is commonly thought to have lived in the middle of the fifth century, and in the epitomiſer of Strabo, probably alſo in Ptolemy; but the paſſages of theſe hiſtorians that relate to our ſubject deſerve a more accurate inveſtigation. — Jornandes and Procopius, two contemporary hiſtorians of the ſixth century, are the firſt by whom they are diſtinctly named. *Schlœtzer.*

were probably the antient ſeat of the Slavi. Hence they ſpread themſelves to Dacia, to Germany, and to the countries lying beyond the Danube; theſe regions were the cradle of thoſe countleſs ſwarms which over-ran the half of Europe and Aſia, or reduced themſelves to ſubjection.

Towards the middle of the fourth century all the ſlavonian races were ſubdued by Ermanarik, and incorporated with the Oſtrogoths into one government. Soon afterwards both the dominant Oſtrogoths and the ſervile Slavi were rendered ſubject to the victorious Hunns. A century had ſcarcely elapſed when theſe diſturbers of the world were either exterminated on the one hand by the gothic Gepidi, or on the other driven to the farther ſide of the Danube by the finniſh Ungres and Bulgarians. The Slavi began to ſhew themſelves in Dacia, preſſed between the Ungres and the Gepidi, and took up a part of the northern ſhore of the Danube. Here we find them entering, as a peculiar people, among the barbarians who menaced from the north the downfall of the declining roman empire*; hence they plundered the roman provinces;

* In order not to leave the curioſity of ſome readers entirely ungratified, we will here obſerve, that the Slavi on the Danube, during a courſe of ſeveral centuries played no inſignificant

provinces; hence they ruſhed like a torrent on the country of the Gepidi, who were almoſt entirely extirpated by the Longobards and Avari. The Avari arrogated to themſelves a ſort of ſovereignty over the various ſlavonian races, and occaſionally extorted from them a tribute; but this people too was at length ſwallowed up by the Bulgarians, who now, by theſe acceſſions of people, extended themſelves over all Dacia. Forced by their oppreſſions, the greater part of the dacian Slavi abandoned their dwellings, and retreated (probably about the middle of the ſeventh century) from the Danube to the north. Some tribes withdrew to Poland, others to

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nificant a part among the barbarians, who, by their predatory incurſions accelerated the downfall of the grecian empire. Their firſt attacks were made in the time of Juſtinian I. about the year 527, but they returned, not long afterwards, to their ſeats on the northern ſide of the Danube, and, not till towards the year 602, began to ſettle on the ſouthern ſide of that river. — A complete hiſtory of the danubian Slavi, from the year 495 to 1222, is given by Mr. Stritter of Moſco, from the byzantine writers, in his celebrated work: Memoriæ populorum, olim ad Danubium, pontum euxinum, paludem mæotidem, Caucaſum, mare caſpium, et inde magis ad ſeptentriones incolentium, e ſcriptoribus Hiſtoriæ Byzantinæ erutæ & digeſtæ. Whoever finds theſe accounts too dry for his peruſal, may read an entertaining account of the Slavonians of thoſe times, and their intercourſe with the ſtate of Rome, in the immortal work of Mr. Gibbon.

Ruſſia, and a part of them remained on the Danube.

Thus were theſe countries peopled by ſlavonian colonies, who were ever ſpreading farther and wider, founding governments in every place, and occaſioned the moſt ſignal revolutions in the north of Europe. All the branches of this grand ſtock, who have formed peculiar ſtates, may be ranged by their preſent condition in ſeven claſſes, that is, into ruſſian, poliſh, bohemian, german, illyrian, hungarian, and turkiſh Slavonians. Three of theſe branches we find in the ſpacious territory of the modern ruſſian empire: the Ruſſians, the Poles, and the Servians.

1. The aborigenes of Ruſſia were of two races: FINNS and SLAVONIANS. The former poſſeſſed the regions of the Volga and the Duna; the latter dwelt about the Dniepr and the upper Don. The main ſeats of the Slavonians were properly in Lithuania and Poland; only one arm of that body extended over the Dniepr. When the danubian Slavi, being cruelly oppreſſed by the Bulgarians, fell back to the north, they ſpread themſelves farther on the Dniepr, where they conſtructed Kief. One colony of theſe Slavonians penetrated up the Volkhof and laid the foundations of Novgorod. After a dark

period

period of more than a hundred years, this latter race again appear amidſt the finniſh nations, and at this point of time it was that the ruſſian ſtate received its origin from the Scandinavians or Northmanni.

Shortly after the ſettlement of both theſe ſlavonian races on the Volkhof and the Dniepr two hoſtile nations aroſe and became their oppreſſors: the Chazares from the Euxine, and the Varagians, Varingians or Northmanni * from the

* As the Varagians had ſo conſiderable a ſhare in founding the ruſſian ſtate, it will perhaps be not unacceptable to find here a compendious view of their pedigree and fortunes. The Norrmanni, who in Ruſſia were called Varagians or Varingians, were a northern people of gothic deſcent, a warlike multitude, compoſed of Danes, Swedes, Norwegians, who, perpetually in queſt of adventures, eſtabliſhed governments in the weſtern and eaſtern parts of Europe, and produced revolutions, eſpecially in the ſouth, the conſequences whereof extended throughout our quarter of the globe. The firſt trace of their maritime expeditions is diſcoverable about the year 516; though it is probable that they carried on their piracies much earlier, and were only comprehended under the name of Franks, who already appear under the emperor Probus as enterpriſing mariners. In the year 795, they are firſt perceived in Ireland. About the year 813, they began their incurſions by the Elbe, into Frieſland and Flanders; in proceſs of time they proceeded to Aquitaine and along the Seine; about the year 840, they

the Baltic. Under various turns of fortune, of which but little is known with certainty, both races obtained their independence till the ninth century; when the Varagians conquered from the Ruſſians, a kindred north-gothic people *, the

they ravaged France, and in 857, made the conqueſt of Luna, and afterwards of Piſa in Italy. In the year 862, Rurik founded the ruſſian monarchy; about the ſame time too, a Norrmann of a ſimilar name, Rorich, became famous in the hiſtory of Holland. Soon after this, Oſkold and Dir founded another ſovereignty at Kief. In the tenth century Ragnvald reigned in Polotſk, from whoſe daughter Rogned the ruſſian annals derive the grand-dukes of Lithuania. About the year 1000, they take Apulia from the Greeks, and Sicily from the Arabians. They gave Normandy its name, after Rollo had wreſted that country from the kings of France. Even the conqueſt of England by the Danes, in ſome degree forms a part of their hiſtory. *Allgemeine nord. geſch*, p. 220.

* The earlieſt mention of this name is in the Bertinian Annals, at the year 839, therefore prior to Rurik's reception in Novgorod. *Diſſert ſur les anciens Ruſſes*, p. 1. — However hiſtorians may have hitherto differed in opinion concerning the origin of the Ruſſi, Ruotzi, or Ruſſes, yet at preſent the generality and the moſt authentic are agreed in this, that they belong to the varagian race, and therefore were originally Norrmanns or Scandinavians. — Thunmann affirms them to be Swedes deſcended from Scandinavians, and ſpoke the ſcandinavian tongue. *Unterſuch. ueber die geſch. der aſtl. europ. volk*, p. 374.

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the modern diſtricts of Reval, St. Peterſburg, and Archangel, and ſubjected the Slavonians, Krivitſches, Tſchudes, Veſſenians, and Merænes * to

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The ſituation of the antient Ryſſaland or Ruſsland, may be aſcertained by the towns which are mentioned by the chronographers. The Ruſſians, for example, poſſeſſed Rotala, which lies in the preſent government of Reval; Aldenborg (now old-Ladoga) which lies in the government of St. Peterſburg; Alaborg, which is in the government of Olonetz; and Holmgard, (now Kholmogor,) which is in the government of Archangel. *Bitopiſſaniye*, &c. p. 2.

* Theſe tribes were partly Slavonians and partly Finns. To the former belong, 1. the proper Slavi or Slovænians, who dwelt on the lake Ilmen, in the preſent government of Novgorod. Of all the ſlavonian races which ſettled in the preſent territory of Ruſſia, this was the only one that retained its primitive denomination; the reſt took their appellative from the reſidences they choſe. Among thoſe who ſettled about the Dniepr, and whom we comprehend under the general denomination of Kievian Slavi, ſome were called Polænians (from field, plain; in ruſs Pole), others Goranians (from Gora, a mountain), Drevlanians (from derevo, a tree, a foreſt), Severians (from ſever, the north); Polotſchanians, after the river Polota; Sulanians, after the river Sula; Bugſchanians, after the river Bugue, &c. — Under the name Slavonians or Slovænians, in Ruſſia were only known, thoſe who lived about Novgorod. 2. The Krivitſches, a ſlavonian ſtock, at firſt dwelling between the rivers Pripet and Dvina, and who afterwards ſpread themſelves farther up the rivers Volga, Dvina, Oka, and Dniepr, and

to a tribute. The Ruſſians retired to Finland and Karelia; but the Slavonians, in conjunction with the reſt of the aforenamed nations, drove out the Varagians, and formed themſelves at the lake Ilmen, near Novgorod, into a federative democratical republic. As the defects of this conſtitution ſoon gave occaſion to inteſtine diſturbances, the five united nations came to the reſolution of calling in the Ruſſians to reſtore tranquillity to their country, and to give them protection; in order to which they offered voluntarily to reſign the ſovereignty to them. The

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and thence obtained their name (from Krivi the upper part). After theſe old ſlavonian people the Lettiſh to this day denominate Ruſſia. The region inhabited by the Kriwitſches (now the governments of Polotzk, Smolenſk, and Minſk) fell more recently under the dominion of Lithuanians, and was named thenceforward Lithuanian-Ruſſia, Rus Liteſika. By the poliſh partitions of 1773 and 1793, the ruſſian empire got back theſe long-withholden provinces. — To the finniſh nations belong: 1. the Tſchudes, as the Ruſſians are wont to call them, and under which the Finns and Eſthonians are eſpecially implied, who had their ſeats in ſome diſtricts of the preſent governments of Pſcove and Reval. 2. The Veſſenians, on the Bielo-Oſero, in the diſtrict of Novgorod. 3. The Meres or Merænians, in the parts where are now the governments of Vladimir, Yaroſlaf, and Koſtroma. Theſe are probably the preſent Mordvines.

ruſſian

ruſſian prince Rurik, with his brothers Sineus and Truvor, accepted the invitation. Rurik collected all his people together, came in the year 862 to the mouth of the Volkhof, and took upon him the government of the new-erected ſtate, which from the very firſt compriſed ſix ſeveral tribes, ſlavonian, finniſh, and varagian, extending over the regions of the preſent governments of Riga, Reval, Polotſk, Pſcove, Viborg, St. Peterſburg, Novgorod, Smolenſk, Olonetz, Archangel, Vladimir, Yaroſlaf, Koſtroma, and Vologda.

Though the Varagians compoſed the predominant, and under Rurik the moſt conſequential part of the people, (which is principally proved from this circumſtance, that in the hiſtory of his time only varagian names are mentioned,) yet Slavonians and Ruſſians were ſoon blended into one nation; and though the name of the latter was transferred to the whole nation, yet the ſlavonian language and manners retained the ſuperiority, as that people were conſidered as the predominant part both in numbers and in civilization.

Rurik, the proper founder of the ſlavonian ſtate, immediately took up his reſidence at Staraya Ladoga, and ſtyled himſelf grand-prince, thereby

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to denote his ſupremacy over the ſubordinate princes. By a kind of patrimonial conſtitution the grand-princes had the right of granting to their ſons or younger brothers diſtinct principalities. This right Rurik, as the eldeſt, exerciſed with his two brothers. Sineus received Bielo-Oſero, and Truvor Iſborſk, for their reſidences, as chief towns of dependent countries. Both died childleſs one ſhortly after the other; Rurik reunited their territories with his own; and, in the fourth year of his reign, removed his reſidence from Old Ladoga to Novgorod, which from that time forward became the capital of the ruſſian monarchy.

Scarcely had RURIK elevated himſelf ſole-ruler of the novgorodian ſtate, when the Slavonians dwelling on the Dniepr, being oppreſſed by the Chazares, applied to Rurik, requeſting him to give them a prince of his race to rule over them. Rurik ſent them his ſtepſon Oſkold, who ſubdued the Chazares, and founded at Kief the ſecond ſlavo-ruſſian dominion, dependent on the novgorodian empire.

The progreſs of the ruſſian monarchy is ſo fertile in great events, and runs ſo deeply into the hiſtory of the neighbouring nations, that the relation

relation of them can be no object of this hiſtorical ſketch. We will therefore purſue the chief nation alone in the moſt memorable periods of its hiſtory, in order to enable us to ſee at one view the gradual courſe of the formation and enlargement of the preſent extenſive and powerful empire of Ruſſia.

OLEG, the immediate ſucceſſor of Rurik, who reigned as guardian of his nephew Igor, united Kief, which would now no longer acknowledge the ſupremacy of the novgorodian grand-princes, completely with the ruſſian territory, and elevated this ſecond ſlavonian family-ſeat, to be his reſidence and the capital of the country. — Under theſe and the following reigns the power of the empire was rapidly increaſing. Ruſſian armies appeared before the gates of Conſtantinople; a multitude of nations were rendered tributary; the Ruſſians carried on a regular commerce to the coaſts of the Euxine; they built cities, embelliſhed and gave laws to ſuch as were already in being. — On the death of VLADIMIR the great, in 1015, who embraced the chriſtian religion, and introduced it into Ruſſia, this haſty progreſs of the nation was checked by the partition of the ſtate among his twelve ſons.

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This pernicious policy, which was even continued by his ſucceſſors *, had for its conſe-

* The grand-princes, as patrimonial lords of the country, granted to their ſons, younger brethren, and other relations, diſtinct principalities; and this not only in their life-time, but even by teſtamentary bequeſts. The ſeveral princes were bound to do homage to the grand-prince, as their father or elder brother, and were his principal vaſſals. The grand-prince had the right to reſume the principalities which he had beſtowed, and to tranſlate theſe his vaſſals, eſpecially when they were his ſons, from one principality to another. Upon the deceaſe of the grand-prince, from whom a diſtinct prince had received his principality, it became hereditary, and was regarded as the patrimony of the prince and his family; by which means every ſeparate prince acquired nearly as much power in his territory, as the grand-prince had in the grand-principality. — After the death of Igor or George I. in 1157, the princes of Vladimir, on the Kliaſma, emancipated themſelves entirely from the ſupremacy of the grand-princes of Kief, and thereupon aſſumed the title of grand-princes. This example was ſoon followed by the princes of Vladimir on the Bogue, Galitſch on the Dnieſtr, Smolenſk, and Tſchernigof; and from the time of Yaroſlaf II. who died in 1246, the ſame was done by all the ſeparate princes who had received the patent of their principalities from the tartarian khans. — Simeon the proud, however, who died in 1353, made his brothers not only vaſſals, but ſubjects: Dmitri Donſkoi publicly required all the ruſſian princes to pay him unconditional obedience; his ſon Vaſſilly forced the princes of Suſdal and Niſhney-Novgorod to unlimited ſubmiſſion, and Ivan I. at length reſtored the complete ſovereignty and indiviſibility of the empire.

quences

quences devaſtation and war. Ruſſians took up arms againſt Ruſſians, brethren againſt brethren; and amidſt theſe bloody contentions, which were ſtill the more deſtructive as either party ſtrove to ſtrengthen itſelf by calling in the aid of foreigners, aroſe a *third* powerful ſtate: White Ruſſia or Vladimir.

Ruſſia had now three independent grand-principalities within its borders, beſides ſeveral ſmaller ſtates ariſen by partitioned lines. Vladimir was the moſt powerful of them, and its ſovereign was conſidered, during the following period of the tartarian oppreſſion, as the proper and only grand-prince of Ruſſia. At firſt Suſdal was the reſidence of this ſtate, afterwards Vladimir, and at length this honour fell to the lot of Moſco, which city George I. had founded in the year 1147. — Vladimir, as well as Kief and Novgorod, which latter grand principality had adopted a ſort of monarchic-republican form of government, maintained an uncertain and often controverted ſupremacy over the ſmaller principalities, of which ſeveral from time to time had ſprung up, and which, unmindful of their common lineage from the houſe of Rurik, lived in a ſtate of perpetual warfare.

This ſtate of the nation muſt have greatly facilitated the means of its ſubjugation to any foreign

reign enemy; how much more to a wild and warlike nation, which, by the magnitude and rapidity of its conquests, was already become formidable to all Asia. Mongoles and Tartars, who, under their khan Tschingis at the beginning of the thirteenth century had united themselves into a powerful state, and had brought into subjection the greater part of Asia, now, in 1237, under the conduct of his descendant Batu, khan of Kaptschak, fell upon the southern Russia, where, after repeated predatory incursions, they founded a formal sovereignty. Kief fell first (1240) under their power; the grand-prince of Vladimir did homage to the khan of Kaptschak, and the lesser princes voluntarily followed his example. The Tartars now slackened their conquests, in order to turn them to greater advantage: they numbered the people in the principalities, imposed on them a heavy tribute, and thus riveted the oppressive yoke of foreign sovereignty which the Russians bore for upwards of two hundred years.

During this melancholy period, the grand-prince of Novgorod, Alexander, honoured with the surname of Nefsky, made himself famous by the victory which he obtained over the Swedes on the banks of the Neva, and another in Livonia (1250) over the knights of the Teutonic

order. On the other hand Kief was loſt to the ruſſian territory (1320) with the greater part of ſouthern Ruſſia, and fell to Gedimin, the heroic grand-prince of Lithuania, who raviſhed this beautiful ſpoil from the Tartars. Smolenſk, Polotſk, Tur, and Vitebſk, had already fallen under that ſupremacy. Vladimir, the capital whereof in 1328 was transferred to Moſco, continued, notwithſtanding its being a fief to the Tartars, to be the mightieſt of all the principalities; and the free-ſtate of Novgorod, which was ſecured by its diſtance from the oppreſſions of the Tartars, was growing rich amidſt the general calamity, by commerce, and even ſpread its conqueſts northwards over ſeveral neighbouring regions.

The partition of the ruſſian empire, and the general confederation of the mongole-tartar nations were the cauſes that co-operated to the ſubjugation of Ruſſia; an oppoſite mode of conduct liberated the Ruſſians, and caſt the yoke which they had ſo long borne back upon the necks of their former conquerors. Oppreſſion and deſpair at length combined the ruſſian princes in one common ſentiment: ſeveral of the tartar hordes had made themſelves independent, and internal diſturbances and bloody conteſts completed the ruin of others.

Such was the ſituation of things, when Ivan I. in 1462, aſcended the throne at Moſco. This

grand-principality had, even under the preſſure of foreign ſupremacy, collected force for oppoſition. The principalities of Suſdal and Niſhney-Novgorod were already in union with it: the princes of Pſcove and Tver acknowledged it paramount, and the republic of Novgorod at leaſt did not refuſe its ſubmiſſion. Theſe means and the perſonal character of Ivan decided his brilliant lot; that of being the reſtorer of the independence of his country, and the founder of the new ruſſian monarchy.

Ivan had reigned fourteen years, when he refuſed obedience to the Tartars, and juſtified this daring ſtep by victories which gained him the tartarian kingdom of Kazan, and made its ſovereign his tributary vaſſal. The republic of Novgorod, which ſtrove to maintain its independency under lithuanian protection, ſubmitted in 1477 to the force of his arms. A ſimilar fortune befel the principalities of Pſcove and Tver. Lithuania loſt a conſiderable part of its territory. The princes of Severia voluntarily ſubmitted. The teutonic order in Livonia alone withſtood the increaſing power of Ivan.

Under his ſucceſſor, indeed, the riſing monarchy loſt for a ſhort time the kingdom of Kazan, but in return Smolenſk was incorporated again into the ruſſian ſtate. — Ivan II. at length burſt the laſt ſhackles of the mongole-tartarian ſovereignty,

reignty. The entire conqueſt of the kingdom of Kazan was completed in ſeven years; the capital of it ſurrendering in 1552. Two years afterwards Aſtrakhan became a ruſſian province. Hence Ivan preſſed forward into Caucaſus and ſubdued the whole Kabardey. On the other hand, his plans of conqueſt were fruſtrated in Livonia, which he was forced to relinquiſh after a conteſt of twenty years attended with numberleſs cruelties. The oſmanian Turks, in conjunction with the Tartars of the Krim, fell upon Ruſſia and ravaged its capital; but theſe diſaſters were greatly overbalanced by the opening of a channel for commerce by ſea by way of Archangel, and by the conqueſt of Siberia, which date their commencement from the reign of Ivan, and were ſlowly but firmly completed under his ſucceſſors.

By this conqueſt, for which Ruſſia is indebted to a bold and ſucceſsful robber, the monarchy extended its dominion over an immenſe tract of country, rich in the nobleſt productions of nature, and inhabited by a multitude of nations till then unknown. — Ivan's ſucceſſor, Feodor, abandoned his claim to Eſthonia, and obtained in return from Sweden a ſecurity to his poſſeſſions of Ingria and Karelia.

By Feodor's death in 1598, the dynaſty of Rurik was extinct. During the interim till the

election of a new tzar of the houſe of Romanof in 1613, the empire was a prey to confuſion and deſolation. The well-known events of the pretenders under the name of Demetrius had implicated the Poles and Swedes in the internal affairs of Ruſſia; and Mikhaila Romanof could only by large ſacrifices purchaſe the repoſe of his empire. He was obliged to relinquiſh Ingria and Karelia to the Swedes, and Smolenſk, Severia, and Tſchernigof to the Poles.

This was however the laſt misfortune that diminiſhed the power of the ruſſian empire. From that period to the preſent day, Ruſſia has not only been regaining its antient poſſeſſions, but ſo far extended and enlarged them, that the preſent circumference of the empire knows of no parallel in the hiſtory of the world.

Alexey, the ſucceſſor of Mikhaila, not only reconquered the countries relinquiſhed by his father to the Poles, but reduced alſo Kief and the Ukraine on the eaſtern ſide of the Dniepr, in 1655, to a reunion with the parent-ſtate of the ſlavo-ruſſian nation. — His ſon, the immortal Peter I. the creator of modern ruſſia, acquired to his empire in 1721, by a twenty years war with Sweden, the provinces on the ſhores of the Baltic, which had been for ſo many centuries the ſource of bloody contentions among the northern powers: Livonia, Eſthonia, Ingria,

Ingria, and a part of Kexholm and Karelia, were subjected to the ruſſian ſceptre, and procured to the empire, beſides incalculable advantages to commerce, a firm and reſpectable footing among the chief european powers. — A ſecond acquiſition of the perſian provinces of Dagheſtan, Shirvan, Ghilan, Mazanderan, and Aſtrabat, was, after thirteen years poſſeſſion, voluntarily abandoned.

Catharine II. brought aggrandizement to Ruſſia within and without by a reform of its government, and ſeveral ſucceſsful wars. She obtained from the porte, by the peace of Kutſhuk-Kainardgi in 1774 the poſſeſſion of the city of Azof, with the territory belonging to it; and for the ſecurity of the ruſſian navigation on the Euxine, the forts of Kinburn, Kertſch, and Yenicaly in the peninſula of the Krimea. A few years later, (1783,) the whole provinces ſimply by a treaty became a ruſſian government; and in its preſent denomination the antient name of the Tauridan Cherſoneſe is reſtored. In virtue of the ſame convention Ruſſia enlarged her borders to the ſouth by the Kuban, where now the caucaſian mountains form the boundary of the ruſſian dominion. In a ſecond attempt to abate the preponderant power of Ruſſia, the porte once more ſubmitted, and was obliged to pay for the unfortunate termination of the quarrel

by the ſurrender of a conſiderable tract of country on the ſhores of the Euxine, between the Bogue and the Dnieſtr. — On the other ſide wretched Poland, by a ſurpriſing viciſſitude of fortune, paid dearly for the injuries which Ruſſia had formerly ſuſtained from this once powerful ſtate. In the famous partition which firſt reduced the national imbecility and political nullity of this republic to an almoſt incredible proof, Catharine obtained for her ſhare in 1773 the four lithuanian voivodeſhips of Smolenſk, Vitepſk, Mſtiſlaf, and poliſh Livonia, with a part of the voivodeſhips of Polotſk and Minſk. The late and ſudden attempts, through favour of temporary circumſtances, to withdraw from under the ruſſian influence, and to reſtore the ſufficiency of the nation by a new conſtitution, involved the exhauſted republic in an unproſperous war, which ended (1793) in the loſs of the fine and fertile provinces of the Leſſer Poland and Lithuania. The laſt and deſperate exertion of the Poles was at length attended by the total diſmemberment of the country; the capital of the kingdom fell into the hands of the Ruſſians; the political exiſtence of the republic was annihilated, and the laſt veſtiges of it were loſt (1796) in the confines of the bordering ſtates. — One conſequence of the annihilation of Poland

land was the acquiſition of the duchies of Courland and Semigallia, including the circle of Pilten, which on the diſſolution of their feudal connexion with the republic, by a reſolution of the eſtates of the country, ſubmitted themſelves unconditionally in 1795, to the ſceptre of the empreſs *.

While Catharine the ſecond was augmenting the power of her empire on one ſide by conqueſts and treaties, ſhe ſtrove on the other to promote the ſame object by the mild authority of her laws, and the methods of civilization. Compelled by the exigences of his ſituation, the mightieſt of the princes of Caucaſus, the tzar of Kartuelia and Kakhetty put himſelf under the

* According to an authentic eſtimate, publiſhed in 1796, by Major Oppermann, the acquiſitions made during the reign of Catharine II. are thus given:

	Square verſts.	Inhabitants of both ſexes.
At the firſt partition of Poland in 1773	76,558	1,226,966
From the porte in the years 1774 and 1783	113,100	171,610
From the porte in the year 1791	23,053	42,708
At the ſecond partition of Poland, 1793	202,383	3,749,663
By the ſubjection of Courland	16,273	387,922
At the third partition of Poland, 1795	94,645	1,407,402
Total	526,012	6,982,271

protection of the ruſſian empire, by acknowledging in 1783 the ſupremacy of its monarch. Catharine invited people from all countries to come and ſettle in her dominions, and thus eſtabliſhed numerous colonies. She reduced a multitude of tributary nations dwelling in the heart of Siberia to a complete ſubmiſſion to her laws. She ſet on foot and encouraged ſeveral voyages of diſcovery, which obtained for the ruſſian empire a new ſovereignty in the eaſtern ocean, and on the weſtern coaſt of America.

It appears, then, from the concurrent teſtimonies of hiſtory, language, and phyſiognomy, that the Ruſſians are of ſlavonian origin, and conſequently are related to the Poles, the Bohemians, the Slavonians, and other nations of the north. At the time of the great emigrations from the eaſt, in the fifth century of the vulgar æra, being diſturbed in their abode on the Danube by the Bulgarians and Valakhians, they diſperſed themſelves various ways; ſome marching to the Dniepr, where they built Kief, others bending their courſe to the Volkhof that flows into the Ladoga lake, and there laid the foundations of Novgorod. The latter colony fell under the ſway of the Varages; by whom they were named Ruſſi, and their country Ruſſia or Roſſia, which appellation they adopted themſelves.

ſelves. Both the ſlavonian colonies were democracies; but their regent Rurik, in the year 862, made them a monarchy, which ſoon extended its limits far and wide. Towards the cloſe of the tenth century, Vladimir introduced the ceremonies of the greek religion, to which he made thoſe of the pagan give place. The ſubſequent partition of the empire among ſeveral princes was favourable to the incurſions of the Tartars; and the thirteenth century ſaw Ruſſia in ſubjection to Baaty, the khan of the Golden Horde, and his deſcendants, and Kief ſubmiſſive to the yoke of the Poles. In the latter half of the fifteenth century the grand duke Ivan Vaſſillievitch the firſt very much curbed the Tartars; and about the middle of the ſixteenth century Ivan Vaſſillievitch the ſecond overturned the tartarian empire, and made its kingdoms of Kaſan and Aſtrakhan tributary to his ſceptre. He extended the boundaries of his dominion to the foot of the caucaſean mountains. In the year 1578, the conqueſt of Siberia was begun under the auſpices of the grand duke Feodor Ivanovitch, by the don-koſak Yermak Timofyef, which was continued during the following reigns in the ſeventeenth century to the ſhores of the eaſtern ocean and the banks of the Amoor.

With

With the commencement of the preſent century, Peter the great began to reform the political and moral condition of his empire, made diſcoveries in the northern and eaſtern oceans, by which he enlarged his dominion almoſt to Japan and the american ſhores, and extended the boundaries of the empire towards Sweden and Perſia. It was reſerved for Catharine the ſecond to proſecute the plans of Peter; to extend the limits of the empire towards Poland; to give efficacy to the moral improvement, the proſperity and the happineſs of the people; and by wholeſome laws, by the inſtitution of ſeminaries of learning, to tranſmit the energy and the glory of her reign to future generations.

We have already ſeen the prodigious extent of the empire. But notwithſtanding the great diſperſion, and the conſequent diverſity of countries, climates, and ſituations, the people have far more reſemblance in point of perſon and manners than thoſe of different nations in ſmaller ſtates. Ruſſians about Novgorod, Aſtrakhan, Archangel, Tobolſk, Yakutſk, are not ſo different as Germans from the various circles of that leſs extenſive empire. The uniform, ſimple, natural mode of life, a mind exempt from care, and a fameneſs of religion, particularly from their

their influence on the diet, ſeem to be the principal cauſes of this little alteration.

The ruſſian language is an improved dialect of the ſlavonian, which, with its characters, is ſtill in uſe in the offices of religion. The ruſſian alphabet has 41 letters, whereof ſome are only notes of accent in pronunciation. The language is rich in words, ſoft, expreſſive, and requires great pliancy in the organs of utterance. Seminaries have been founded of old in the epiſcopal ſeats; gymnaſiums and the univerſities of Kief and Moſco are foundations of great antiquity. There was, however, a deficiency in ſchools; and therefore the late empreſs was conſtantly adding to their number. Beſides theſe, here are inſtitutions for the education of the military and the nobility, and for young ladies of quality; an academy alſo of ſciences, and another for the ſtudy of the arts, which were entirely re-erected on a magnificent plan by Catharine II. to whoſe munificence likewiſe the nation is indebted for the eſtabliſhment of an academy for the improvement of rural economy, and a ſociety for the cultivation of the ruſſian language. In all the ſeveral inſtitutions for the purpoſes of education throughout the empire, the pupils are found in every neceſſary article,

article, ſuch as board, lodging, food raiment, waſhing, &c. and are dependent on the foundation. Accordingly the entrance into theſe ſchools is accounted a ſervice rendered to the country; and in reckoning the years of ſervice, in order to promotion in rank, the years of attendance at ſchool are always included.

The native Ruſſians are of different ſtature; ſome are very tall, but few much below the uſual height; ſeveral of them are remarkably ſtrong limbed, in general they are lean, but well built. Thoſe deformities which in other parts of Europe are moſtly owing to the refinements of luxury introduced into education, are here but rarely ſeen: their mouth and eyes are ſmall, the lips thin, the teeth even and beautiful, the noſe, as every where, various, in general not large nor very aquiline; the forehead frequently low, and their aſpect rather grave: the beard is ſtrong and buſhy, their hair lank, brown, flaxen, or red, ſeldom or never entirely black: in ſight and hearing they are uncommonly acute: the organs of feeling, ſmell, and taſte, are hardened, like all the reſt of their body, by the rudeneſs of climate, and their manner of life. They are moſtly of a ſanguine choleric temperament, and vice verſa, with a greater or leſs mixture

mixture of the melancholic, ſeldom of the phlegmatic, ſtill ſeldomer merely melancholic or phlegmatic: in gait and action they are briſk, lively, and agile.

The complexion of the females is brunette, with a fine ſkin; many of them extremely handſome. As not any reſtraint is put upon their growth, their breaſts and feet are large; the former far more full than thoſe of the tartar women. Girls generally arrive early at maturity, numbers in their 12th or 13th year; but many of them loſe all their beauty, after being married but a couple of years. The frequent uſe of the hot-bath promotes an early developement, and as early a decay; and the hideous practice of painting ſpoils the ſkin. As the women, among the lower ſtations in general are kept on harder fare, and more accuſtomed to work than the girls, they are alſo more negligent of their perſons.

The general diſpoſition of the people is gay, careleſs even to levity, much addicted to ſenſuality, quick in comprehending whatever is propoſed, and not leſs prompt in its execution; ingenious in finding out means of abridging their work; in all their occupations ready, alert, and dexterous. Violent in their paſſions, they eaſily miſtake the golden mean, and not unfrequently

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ruſh into the contrary extreme. They are attentive, reſolute, bold, and enterpriſing. To trade and barter they have an irreſiſtible impulſe. They are hoſpitable and liberal, frequently to their own impoveriſhment. Anxious ſollicitudes about the future here cauſe but few grey pates. In their intercourſe with others, they are friendly, jovial, complaiſant, very ready to oblige, not envious, ſlanderous, or cenſorious, and much given to ſecrecy. From their natural and ſimple way of life, their wants are few, and thoſe eaſily ſatisfied, leaving them leiſure for recreations and repoſe; and the conſtant cheerfulneſs of their temper frees them from troubleſome projects, procures them ſatisfaction in all ſituations, keeps them healthy and ſtrong, and brings them to an undiſquieted, contented, briſk, ſometimes a very advanced old age.

The nation chiefly conſiſts of the nobility and peaſantry; but we may alſo admit the burgeſſes, a claſs which was conſtantly more and more raiſed and encouraged by the late ſovereign; to which may be added the kozaks as another order. The nobility is compoſed of princes *, noblemen, or boyars; and, in later times, of princes of the roman empire, counts, and barons. The nobles may be proprietors of land and people, and hold the higheſt offices in the

* Kniaſi.

civil and military departments. The dvorianini are in a manner city-nobles, though not properly to be compared with the patricians of the cities of Germany. Odnodvortzi are the loweſt claſs of nobleſſe, ſomewhat ſimilar to the body-guards in Poland.

The burgher ſtate, yeomanry, or commonalty, to give it ſomewhat of an engliſh term, though neither of them will properly expreſs it, is compoſed of the Poſſatſki and Raſnotſhintzi, who live in towns and villages, governed by their proper magiſtrates, whether as merchants or tradeſmen. They are excluded from offices and poſts of ſervice or honour, furniſh head-money and recruits, but cannot be vaſſals. By the uncontrolled freedom of trade that is enjoyed in this country, whereby any man may now follow one calling and then another, and not conſtantly adhere to either, merchants and handicraftſmen oftentimes live by agriculture alone, while boors ſubſiſt by trade and buſineſs. It is not uſual for the latter to employ journeymen and apprentices, but only workmen and labourers. However, this claſs is ſo totally diſſimilar from any order of men in our own or other countries, that a more circumſtantial account of it is not here to be expected, but will more properly find a place in the following book.

By

By an edict of the year 1775, the merchants pay annually at the rate of one per cent. on their capital in lieu of the capitation tax, and are also allowed to pay money instead of the recruits they are bound to furnish; by which this rank has been greatly raised.

Of the peasantry, such as belong to the crown and the monasteries pay taxes according to the laws of the land, and are liable to the other duties imposed by the same authority; but they may be made over to particulars as donatives from the crown. Noble boors, as they are called, are the vassals of their lord, on whose arbitrary disposal they entirely depend, and according to the temper and disposition of whom, they are either treated with harshness or humanity; such as are happy enough to belong to kind and generous masters generally live comfortably enough, and some of them frequently get rich. From all of them such as are fit to be made soldiers are taken by lot as recruits. The peasantry are not bound to follow agriculture, the breeding of cattle, and the other employments of husbandry, but may strike into trade and pursue it either alone or in conjunction with their rural concerns, as they find it most beneficial or convenient.

The

The kozaks form a particular claſs originating from the peaſantry. They live, exempt from taxes, in villages, forts, and petty towns, on the produce of their fields and paſtures or the labour of their hands, furniſh no recruits, are not given away as ſerfs, and enjoy other privileges. But they all ſerve as light horſemen, as early and as long as they are fit for it, providing themſelves with horſes, clothes, and accoutrements, and only receive pay when they are in actual ſervice; of them, however, I ſhall ſpeak more at large hereafter.

The trades carried on by the Ruſſians are in general the ſame as are exerciſed in the other parts of Europe.

The inland commerce ſeems but ſmall, as it is moſtly conducted by ſhopkeepers and monopolizers, and the chief tranſport of goods by land is in caravans; it is nevertheleſs of great importance, by giving employment and ſuſtenance to an innumerable body of people, by the great vent it procures for the products of nature and art, and by keeping the ſpecie of the country in a conſtant and quick circulation. The petty merchants carry on their buſineſs by travelling from place to place about the country; and, therefore, on all occaſions make ſpeedy and frequent returns of their money. By their frugal manner of living, and by the hoſpitality

of the boors which every where prevails, the consumption even on long journies is but small; and thus it frequently happens that an apparently insignificant, unproductive traffic maintains and often enriches a number of families. Formerly all traffic was confined to the annual fairs. The merchants attended them with the commodities they had to dispose of, and bought with the money they got for them, or bartered them against, the products of those parts. For a long time past, every city, every town *, and many great villages, has its regular market, retaining at the same time its annual fairs. The market-places throughout the empire are, in their mode of construction uniformly the same: a quadrangular building of timber or brick, divided into shops, with a piazza before them for the conveniency of customers in all kinds of weather. This frequently spacious and handsome structure, which, on account of the foreigners that sometimes hire shops in them, are called guest-courts †, and in regard to its uses, the buying or bartering-place, and where alone, and not in private houses, articles of trade may be sold, is usually built by the government or the magistracy of the place. At Irbit in Siberia, at Ekatarinen-

* Sloboda. † Gostinoi dvor.

burg,

burg, and above all in the monaſtery of Makarief on the banks of the Volga, near Niſhney-Novgorod, yearly fairs are held, which, for the amount of the turns and returns, may vie with the moſt noted in Europe.

The foreign commerce, till about the cloſe of the fifteenth century, was but trifling, and almoſt wholly confined to Novgorod, which belonged to the hanſeatic league. The Ruſſians were unacquainted with their own products; and, living as they did, in the native ſimplicity of the children of nature, they had little occaſion for articles from abroad. By imperceptible degrees the products of the country were underſtood and explored; and the introduction of a more refined mode of living occaſioned a demand for foreign commodities. Under Peter the great, manufactories got up; the working of mines and all kinds of trade went on in a thriving ſtate; and commercial regulations, duties, &c. gave commerce a proper direction, and ſecured the balance in their favour. It is a general practice with the merchants of Ruſſia to be paid half of the price beforehand of the inland commodities which they buy up and deliver to foreigners, according to contract, for exportation; but to take foreign goods upon a year's credit. Foreigners therefore only gain when all goes right;

but the Ruſſians always, let matters take what courſe they will. For which reaſon they willingly reſign to foreigners the profits accruing from the tranſport, and have themſelves but few ſhips at ſea. The moſt conſiderable maritime commerce, as we have already ſeen, is at St. Peterſburg and Riga, by way of the Baltic; at Archangel, on the northern ocean, &c. at Taganrok, on the Euxine; at Aſtrakhan on the Caſpian, and at Kamtſhatka, on the Eaſtern-ocean. The principal ſeats of the foreign commerce by land are the Ukraine, whence the ruſſian merchants viſit the markets of Poland and the fairs of Germany; Orenburg, where a conſiderable trade is carried on with ſeveral aſiatic nations; and Kiachta in Dauria, where a great mercantile intercourſe is held with China.

Manufactories of wool, cotton, ſilk, flax, metals, &c. paper-mills, wax-bleacheries, ſaltpetre and glaſs-houſes, tapeſtry, and porcelain fabrics, with many other eſtabliſhments of a like nature, partly belonging to the crown, but moſtly to private perſons, and eſpecially the working of mines, employ an immenſe number of people, as well as artiſts and tradeſmen, both in town and country. The products of theſe manufactories yield in no reſpect to the beſt

of

of other countries; which however cannot always be affirmed of the works of the ruſſian artizans.

As the free countrymen pay a tax not only for their fields, but alſo for their heads, they follow huſbandry with that licence I mentioned before; and many of them neglect it entirely in order to devote themſelves to trade and buſineſs. The vaſſal-boors are employed, at the pleaſure of their lord, either in country or city occupations, in manufactories and fabrics, the handicraft trades, or the mines. Agriculture, therefore, is not ſo generally the buſineſs of the peaſantry in Ruſſia as in other countries. However, on the whole it is carried on to ſo great an extent, as not only to furniſh the nations of the empire that eat bread with that article, and the prodigious quantities of corn, at a very moderate price, conſumed by the brandy-diſtilleries; but alſo can export a great ſuperfluity to foreign countries. Even from the 55th to the 60th deg. of north lat. in Siberia, are large tracts of arable land, moſtly fertile, good crops of hay, and ſpacious foreſts. More to the north, cultivation is leſs to be depended on, and the whole ſyſtem of rural œconomy is very liable to failures, and attended with great difficulties. Throughout Ruſſia every village has its proper territory,

and every eſtate its allotted inclofures and commons *. In the leſs cultivated plains of Siberia, every man takes as much ground from the open ſteppes as he can manage. When ſuch a portion of ground is exhauſted, the countryman lets it lie fallow for a year or two, goes and turns up another piece, and ſo proceeds. Frequently theſe little ſtrips of ground lie ſcattered at 20, 50, and even 80 verſts diſtance from the village. The ſize of theſe fields is meaſured eaſtwards †, each of which being 60 fathom long and 40 wide; but in ſome parts, and all over the Ukraine, they are 80 fathom in length and 40 in breadth.

In Ruſſia and Siberia they cultivate winter rye and ſummer rye ‡, winter-wheat § only in Ruſſia as far as the Kama, ſummer-wheat both in Ruſſia and Siberia; barley ‖, ſpelt-barley, or bear-barley ∂, plentifully in Ruſſia; oats θ, in Ruſſia and Siberia; few peaſe, ſtill fewer vetches and beans; a great deal of buck-wheat ξ; in Siberia tartarian buck-wheat φ, millet ω, and the grain called panicum germanicum, only in Ruſſia.

The manure depends much on the quality of the ſoil, climate, and greater or inferior popula-

* Tiaglo. † Deſettini. ‡ Roſh. § Pſhenitza.
‖ Yeſhmen. ∂ Polba. θ Ovtzi. ξ Gretſhucha.
φ Polygonum tataricum Linn. ruſs dikuſha. ω Proſa.

tion,

tion. In well peopled regions the fields are dunged, becauſe the huſbandman can afford them but little reſpite; in fertile diſtricts, however, of leſs numerous habitations, the good arable land endures no dung, requiring only after every 5 or 10 years uſe, 3, 4, or 5 years reſt. Such powerful ſoil is found in different parts of the governments of Simbirſk and Penza, and about Ufa and Orenburg, as alſo in the ſouthern ſteppes of Siberia, in the ſteppes of the Iſet, the Iſhim, the Baraba, about Irkutſk and in ſouthern Dauria. The corn, after dunging, ſhoots up into high ſtraw, and bears no ſolid ears. The moſt ungrateful ſoils are in Finnland, Archangel, and the north of Ruſſia, alſo the north and north-eaſtern parts of Siberia, in Kamtſhatka, &c. They rarely yield an increaſe above threefold, and often entirely fail by the intenſeneſs of the froſt. The common land brings an increaſe of from 5 to 8 fold, and the freſh broke pieces in the above-mentioned ſteppes for ſome years ſucceſſively will give an increaſe of 10 up to 15 fold.

The country people generally make uſe of the little ruſſian or livonian one-horſe plough *. For winter corn they plough twice, for ſummer corn

* Socha.

only once, and always quite flat. On ſome lands the corn is firſt ſtrewn, then ploughed in, and harrowed ſmooth with an additional horſe by the ſide of the other; by which method one man, with two poor feeble horſes, can rid a good bit of ground. In woody diſtricts the boors make new land in the ſwediſh manner, by burning the foreſts, which if they let alone only for three or four years will all be covered over again with young trees and ſaplings.

The corn is cut with ſickles *, in which employment the women and children aſſiſt. They bind it in little ſheaves, ſet it up on the fields in ſhocks, and carry it home in winter on ſledges. They then dry it in ſmall wooden kilns †, with a ſmouldering fire, which they keep burning in a hole near the kiln, and the ſmoke whereof ruſhes into it. The corn thus dried, is ſpread upon the ice of a river, or a floor wetted with water, where it is threſhed with light flails, then ſtored in little barns; and, what remains over from domeſtic uſes, is conveyed to town, which is ſometimes a hundred, nay two hundred, or even four hundred verſts diſtant; where it is ſold, not by meaſure, but by weight; rye and wheat as well as meal, in mat-ſacks ‡ of 8 pood, and, eſpecially in Siberia, at an inconceivably

* Serpa. † Ovini. ‡ Kool.

low

low price. In Kraſnoyarſk, for example, where it is particularly cheap, a pood of rye meal will ſell for 2 to 3 kopeeks; or about a penny. Wheat flour 5 kopeeks, and ſo of the reſt. In Irkutſk they are about three times dearer. — In many parts of the country every boor has his own water-mill * built by himſelf, with a horizontal water-wheel. In cold regions the ſtraw is given to the cattle; but in the ſouthern parts, where the cattle remain out all the winter, it is left to rot.

The villagers, with whom winter provender is a requiſite, have hay-fields, bordering on the banks of lakes and rivers, in brakes and fens of the foreſts. In order to get rid of the old withered graſs, the dry weeds, twigs, and light ſtuff, for warming the ground, and for manuring it with wood-aſh, they ſet it on fire, as they are apt to do with the meadow-lands of the ſteppe in ſpring; though, on account of the great miſchief occaſioned by this practice to the foreſts, whole verſts of them being frequently burnt at once, it is ſtrictly prohibited. When the ſteppes and meadow-lands are thus on fire, the appearance they make, eſpecially at night, is truly tremendous; the fire works its way in all

* Mutoſka.

directions,

directions, frequently in lines that extend farther than the eye can reach, and fill the horizon in ſuch manner with ſmoke, that one may look ſtedfaſtly at the ſun the whole day through. The graſs is mowed with very ſmall ſcythes, and not before the month of July, that it may have time to reach its full growth and ſcatter its ſeed.

Beſides corn, they grow flax *, in large quantities, chiefly on the ſhores of the Volga; but moſt of all in the government of Yaroſlaf, where one ſees flax-fields, as elſewhere corn-fields; the next in the produce of flax are the governments of Moſco and Kazan. It is thought that the common flax would not proſper in Siberia; nevertheleſs ſome Poles, ſettled about the Irtiſh and in Dauria upon the Selenga, cultivate valakhian flax with good ſucceſs. The perennial flax, frequent in the ſouth of Siberia †, is entirely unheeded, though it might be propagated to great advantage.

Hemp ‡ is indigenous in all the ſouth and middle of Ruſſia and Siberia, and in all theſe parts is propagated in great abundance, both on account of its material, for linens, ſail-cloth, &c. and of the oil expreſſed from its ſeed, of which an amazing quantity is conſumed for food during

* Len. † The linum perenne Linnæi. ‡ Kanapl.

the

the fasts, and, as well as the hemp itself, exported annually to a great amount.

Woad likewise grows wild in southern Russia and Siberia; it is gathered in the Ukraine and employed in staining and dying. It is also cultivated, but only in the government of Penza, and about the Don.

Tobacco is planted almost only in the Ukraine; but there in great abundance.

Hops are propagated by the villagers only in small quantities, in the governments of Kazan, Nishney-Novgorod, &c. and in Siberia in the province of Irkutsk. They are plentifully supplied with the wild sort, which thrives almost every where, among the bushes that grow about the banks of rivers, in brakes and low forests.

But little account is made of orchards except in the chief towns: however they are seen about the towns and villages, on the Volga from the region round Mosco down the river to Astrakhan, along the Oka, and the other rivers on the right of the Volga and the inferior parts of the river Ural, and all over the Ukraine, where orchard fruits are cultivated with great diligence and success. After all the attempts that have been made, no fruit-trees will thrive in Siberia. Something of a country wine* is made about

* Tshigir.

the

the Don, in Little Ruſſia, on the Terek, and on the Volga, near Saratof, and eſpecially about Aſtrakhan. Every villager has a little kitchen-garden adjoining to his cottage, particularly for the growth of cabbages, turnips, bete, carrots*, cucumbers, radiſhes, onions, and leeks, a few potatoes, ſome dill, gourds, and melons, indiſpenſable to him on account of the numerous faſt-days. Water-melons † are cultivated in ſurpriſing numbers in the ſouth-eaſtern parts of Ruſſia, from the Don to the Ural, eſpecially on the Volga, in open fields got from the ſteppes, and are eaten either raw, or ſalted like cucumbers.

The foreſts, which are ſcattered ſparingly about the ſouthernmoſt parts of Ruſſia, in the northern extremities above the 60th degree, are not ſeen. They are very common in the middle regions of Ruſſia and in Siberia, and conſiſt alternately of the fir ‡, the pine §, the white fir ‖, the white and black poplar δ, the aſpin ε, the aſh θ, the alder ξ, the birch π, the beech ρ, the oak φ, the linden ω, the mountain-aſh ϗ, the

* Markovi. † Arbooſes. ‡ Tal; pinus picea, and pinus ſylveſtris. § Sofna; pinus abies. ‖ Pichta. δ Topol and Oſokor; populus alba and populus nigra. ε Oſſina; populus tremula. θ Yaſſen; fraxinus excelſior. ξ Olcha; betula alnus. π Bereſa; betula. ρ Buk; fagus. φ Dup; quercus. ω Lipa; tilia. ϗ Rebina; fraxinus montan.

elm,

elm *, the willow †, the palm-willow ‡, and several others: also in the caucasean mountains a great variety of fruit-trees, walnuts, and a kind of red wood §; in Siberia and in lofty mountains the larch ‖, the siberian cedar ♂, and balsam-poplar ε, every where employing a great number of hands. Almost every villager is a carpenter, who builds his own house of balks or trunks of trees, makes wharfs on the navigable rivers, and whatever else belongs to the carpenter's trade. In the upper parts of the Oka and its superior rivers, and on the rivers to the left of the Volga, from the Unsha as far as the Kama, their chief employment is to strip the linden of its bark; the inner rind whereof θ, they work up into baskets for sledges and carts, or make a light covering to their houses of it, to the sheds where the salt is kept in heaps; little huts for sleeping in upon the floats and vessels that go down the rivers, &c. All sorts of household cups, baskets, and the like, are made of it, in common use throughout the whole empire; and the making of what we call russia-mats ξ, trays, troughs, ladles, skimmers, spoons, &c. of the linden wood, is a

* Viæs and Ilina; ulmus campestris, ulmus sativa, Miller; and ulmus pumila. † Tal and Iva; salix triandra, salix pentandra, salix fragilis, salix alba, salix caprea. ‡ Salix arenaria. § A species of the rhamnus. ‖ Listvenitza; pinus larix. ♂ Kedr. ε Topol; populus balsamifera. θ Lub. ξ Ragoshi.

great

great part of their buſineſs. A no leſs number gain their livelihood merely by preparing the birch-tar *, not to mention the occupation of ſo many in ſtripping all kind of trees of their bark for the ſeveral uſes of the tanneries, particularly the youft-manufactories, and the burning of wood for charcoal, which is ſent to the mines, and the different ſtore-houſes belonging to government.

In the breeding of cattle, the countryman is directed by climate and paſturage. In regions where the cattle muſt be ſtalled and foddered during the winter, the boor has at moſt but a ſcanty herd; where they can ſtay out in the open ſteppe all the winter, or the greater part of it; as in the ſouth of Siberia, a man is often maſter of 300 horſes, not fewer ſheep, ſomewhere about half the number of horned cattle, always a few ſwine, and a great deal of poultry; ſometimes geeſe and ducks.

The ruſſian horſes are of a middling ſize, with large heads, long flabby ears, not very handſome, but ſpirited, ſtrong, and hardy. The horned cattle are little and briſk. The cows give but little milk, and that is poor and thin. In little Ruſſia the oxen are uſed for draught. Every where about Archangel there is a fine breed of large cows, brought originally from Holland,

* Dogat.

and

and are not found to degenerate in the leaſt. The true ruſſian ſheep are diſtinguiſhable from the common ſort by their ſhort tail, not above the length of three inches. Their wool is coarſe, but better than that of the broad-tailed kirghiſtzian ſheep, and would probably improve in ſome of the dry ſteppes. There are nowhere any particular ſheep-folds; that is, there are no people who make it their ſole buſineſs to breed and fatten them. It is never the practice to milk the ewes. Hogs, dogs, and cats, are of the ordinary kinds.

The poultry are houſed all the winter in the cottage, under the hearth and the ſleeping-benches, for the ſake of having Eaſter-eggs. The gooſe is not in all places the common domeſtic ſpecies *; many keep wild geeſe †. They catch the young before they can fly, fatten them, and kill them in autumn. On the approach of ſpring they catch others, and thus ſave themſelves the winter's feed. In Siberia at times one ſees the white-headed little gooſe ‡ tamed. Beſides, and inſtead of the domeſtic duck §, ſome cottagers keep the wood-duck ‖, the red duck ♪, the muſcovy duck ♦, and ſeveral other ſpecies. Doves and pigeons neſtle about

* Anſer domeſticus Linn. † Anſer ferus Linn. ‡ Kaſarka; anſer erytropus Linn. § Anas boſchas Linn. ‖ Anas tadorna Linn. ♪ Anas rutila Pall. ♦ Anas moſchata Linn.

the villages, without owners. Turkey-fowl are very common among the poultry in the ſouthern parts of Ruſſia, and wherever there is a good market for them in the large towns.

The culture of bees is indeed principally the concern of the Baſhkirs in the Ural; but alſo is attended to in ſouthern Ruſſia by the ruſſian peaſants, pretty well, and in the baſhkirian method.

In the northern diſtricts of Ruſſia and Siberia the chace is followed as a trade, particularly for thoſe animals whoſe ſkins are uſed as furs, eſpecially ſables and grey ſquirrels, for the wear of the ruſſian gentry in town and country. They roam about in companies; are frequently out for ſeveral weeks at a time in the wilds and deſarts, at the diſtance of ſeveral hundred verſts from their homes. In the fiſheries they are all employed in the ſeveral methods practiſed in other countries.

The carrier's trade is a great ſource of profit to the inhabitants of towns and villages contiguous to the high-roads. Many commodities are tranſported from one end of the empire to another by land; for inſtance, the chineſe goods from Kiachta to St. Peterſburg; european wines, engliſh beer, porter, and ſtaffordſhire ware, from St. Peterſburg or Archangel, to Irkutſk, &c. peltry from Okhotſk, among others.

The

The towns at the diſtance of from 500 to 1000 verſts aſunder ſerve as ſtations for changing the drivers and carriers, for example from Kiachta, Irkutſk, Kraſnoyarſk, Tomſk, Tara, Ekatarinenburg, &c.

From the provinces of Archangel, which have little agriculture and few products, conſequently but little money, the men emigrate every ſpring to the Volga, to get employment in the tranſport-veſſels and the fiſheries, or to earn money in towns or villages, as carpenters, bricklayers, plaiſterers, ſervants, labourers; with which they return in autumn, though ſometimes not till after two or three years abſence. Were it not for this practice, all the money muſt be drained out of ſuch provinces by the taxes, &c. Thoſe who work on the water, and in general all the common mechanics, are called burlaks.

The mixture of town and country profeſſions has been already noticed in general terms. In the different villages all over the empire we ſee the mechanical buſineſſes of towns carried on; but more eſpecially in the parts adjacent to the Volga, and in the vicinity of the governments of Moſco, Niſhney-Novgorod, and Kazan. It is ſcarcely poſſible to come to a village where there is not a ſmith, a taylor, a ſhoemaker, a tanner, a ſoap-boiler, a builder, a joiner, a houſe-

painter, &c. and many of the boors follow theſe profeſſions as their main buſineſs. In numbers of villages almoſt all the boors are either boat and ſhip builders, wire-drawers, braziers, cotton-printers, comb-makers, coopers, dyers, turners, &c. On the Vetluga, a river to the left of the Volga, all the boors of ſeveral entire villages are turners and japanners; in ſome parts of the government of Archangel, numbers are employed in iron-ſmelting, and every where, among the inferior officers of the church, are found painters, limners, &c. All theſe and the like arts and profeſſions are free to all; they deſcend from father to ſon; none has need to ſerve an apprenticeſhip to any calling, or to give proofs of his ability and ſkill, nor is liable to be puniſhed for bad work, unleſs a downright fraud is diſcoverable. Thus the want of workmen is eaſily ſupplied, and all their work is kept at a reaſonable price. But then, on the other hand, beſides that huſbandry is thus deprived of great numbers of hands, all ſecurity of having good work for your money is loſt; the man that is really maſter of his buſineſs will hardly get an equitable price for his work, and probably alſo much good materials will be ſpoiled. In many villages, particularly ſuch as belong to noblemen, are manufactories, on a larger or a ſmaller ſcale,

of

of lacquered wares, ſilk, hardware, &c. which are under the inſpection of the college of manufactures. Pavlova, for inſtance, a pariſh belonging to count Sheremetof, ſituated on the Oka, contains 2300 taxable boors, who are almoſt all ſmiths, and altogether compoſe a manufactory, though every one works for himſelf. They make padlocks, ſhears, knives, ſabres, wind-guns, muſket-locks, files, plane-irons, and other tools, tongs, pincers, &c. The quantity they make, the goodneſs of the work, and the cheap rate at which they are ſold, are truly worthy of admiration. Their goods go as far as Perſia.

The employments of the female ſex, both in town and country, vary but little from thoſe in the neighbouring countries. They ſee to the cleanlineſs of the houſe, ſpin, weave linen and coarſe cloth on frames, in quality but little inferior to what is brought from Germany; they bleach, full, and colour, knot the ends of the threads for a ſpan long, for table-cloths, neck-cloths, &c. make felt, bake bread every day, &c. In general they are kept cloſer to work, and fare harder than is cuſtomary among their european neighbours.

The country market-towns and hamlets are commonly open; are moſtly built in irregular

ſtreets, with little kitchen-gardens and large yards to the houſes. They are ſituated on the banks of the rivers, as the digging of wells is not in practice: as in moſt parts pebbles are not to be had in any conſiderable quantity, the roads and ſtreets are frequently made of timbers, or bauks laid cloſe together having the upper-part made flat with the hatchet. They contain many, not large, but good-looking churches, moſtly of brick and plaiſter. The monaſteries in and near the towns, from their ſtrong walls, maſſy gates, and numerous church-towers, have the appearance of caſtles. The fortreſſes * diſperſed about the country, have ſeldom earth-ramparts, moſtly batteries of bauks laid one on the other, in the ſame manner as they build their houſes; and about theſe a low paliſade †. The canons ſtand on the gates, and upon the angles of the ramparts or batteries on wooden carriages. Their deſign is to keep the tributary tribes in awe, and the neighbouring nomades from the borders. Oſtrogs, or houſes ſurrounded with a paliſade of upright pointed bauks, are either in towns, where they ſerve as priſons for criminals, or ſtand ſolitary in various parts of the country, for the ſame purpoſe as the fortreſſes.

* Krepoſti. † Nadolbi.

Villages

Villages * of very various dimenſions, and pariſhes † are ſituated on the margin of rivers, brooks, lakes, and ſometimes on mere moraſſes and ſprings. The pariſhes, or church-villages, are ſometimes very extenſive; and contain, it may be, 500 or even 1000 and more farms, from 3 to 7 churches, many of brick, markets, and trafficking places. Large villages are frequently called ſlobodes; but many ſlobodes are leſs than church-villages: the houſes are ranged in ſtraight ſtreets, and the ſtreets moſtly laid with timbers.

The proper ruſſian architecture is alike in towns and villages. A meſſuage conſiſts of a dwelling-houſe, a few little ſtore-rooms, ſtables, and a ſtew, or hot-bath, by which the yard is incloſed. All theſe ſtructures are built of bauks, unhewn, placed on one another, and notched into each other at the four corners; ſometimes, though but rarely, on a brick foundation; theſe houſes are covered with boards, and when the owner can afford it, with oak ſhingles. The meaneſt dwelling-houſes conſiſt ſolely of one little room, which therefore has the door to the ſtreet. In it is an oven, taking up almoſt one fourth part of the whole ſpace; adjoining to it,

* Derevni. † Selo.

of equal height with the oven, is a broad ſhelf of board *. The top of the oven and this ſhelf are the ſleeping places of the family. The light is admitted into theſe houſes through two or three holes in the walls furniſhed with ſhutters †, or through a little window of muſcovy-glaſs ‡, or only of bladder, oiled linen or paper. The ſmoke finds its way out as well as it can through theſe apertures in the wall. Theſe rooms, as may well be ſuppoſed, are as black as a chimney; and, as all the houſehold functions are performed in them, ſuch as baking, cooking, waſhing, &c. it is hardly poſſible to keep them clean. They are called, with the utmoſt propriety of ſpeech, black-rooms §. Under the floor of the room is a cellar ‖.

A complete town or country-houſe, for the ſake of having a cellar, ſtands raiſed a fathom above the ground, and has a black-room and a white-room ∂, and between the two, a ſmall paſſage θ. The black-room has frequently a chimney to the oven, and a window of glaſs or marienglas; but the white-room has the oven of tiles, or bricks covered with plaſter. The

* Potak. † Okoſhka. ‡ Sluda; mica membranacea. § Tſhornaia iſba. ‖ Pogreb. ∂ Gornitza. θ Seni.

entrance,

entrance, by a covered flight of wooden ſteps to the aforementioned paſſage, is from the back-yard, not from the ſtreet.

The magazines or ſtore-rooms * are ſmall detached huts, for proviſions, corn, in ſhort all the neceſſary ſtores. The ſtables are mere hovels or ſheds, open to the yard, or at moſt fronted with wattles, paid with mortar; in the latter caſe they are called pokleti. The bath-room † reſembles a detached black-room. It ſtands alone; has an oven like the other, ſmoke-holes, a water-tub, bruſhes, and benches raiſed one above another in the form of a ſcaffold. The corn-kilns ‡ are without the towns and villages. Places thus built muſt be very liable to raging fires; and, when once they break out, they rarely leave any thing unconſumed.

The houſehold-furniture, both in town and country, even among people of opulence, is very ſimple. In the room, which, with very few exceptions, is, at the ſame time, the kitchen, are a table, benches, the ſhelf, which ſerves for the dormitory §, and in the corner one or more holy figures ‖. The rich have a great many of them, ſome with rims of beaten ſilver. Before theſe, lamps or wax-candles are kept conſtantly burning, or at leaſt on all the feſtivals,

* Ambar. † Ban. ‡ Ovini. § Potak. ‖ Obraſſi.

which amounts to nearly the ſame thing; ſo that many of theſe ſummer-rooms have the appearance of little chapels. Culinary utenſils, and thoſe for the uſe of the table, are as few as can well be conceived. As vehicles they make uſe of quite ſmall open one-horſe carts *, or ſomewhat larger, and half covered over like a child's cradle †, alſo with one horſe, without ſhafts, ſo that a collateral horſe can at any time be put to; both kinds of ſuch a ſimple mechaniſm, that almoſt any boor can make a new one or at leaſt repair the defects of the old one even upon the road. They are extremely light and commodious. — Splinters, like laths, of fir or very dry birch-wood ‡ are much more commonly uſed for giving light in the room, after dark, than tallow-candles.

As the country towns, in general, progreſſively endeavour to imitate the Reſidence, one perceives from time to time loftier houſes of wood or brick ſpring up, built in a ſuperior ſtyle, with faſhionable furniture within, gardens laid out in a regular method, &c.

The inferior houſes are much peſtered with domeſtic vermin; beſides the common houſe-rat § and mouſe ‖, they ſwarm with water-rats ♂, bats θ, large beetles ξ very frequent, crickets,

* Telegi. † Cabitki. ‡ Lutchinki. § Kriſſa. ‖ Miſhe. ♂ Kriſſa vodenaia. θ Letutſia miſhe. ξ Tarocani; blatta oriental. Linn.

bugs,

bugs *, fleas † in abundance; various kinds of very troubleſome flies, gnats ‡, moths, bull-moths, wood-lice; in ſouthern low places frogs, toads, and tadpoles; in Siberia little beetles §; about the Tſheremtſhan, lapland beetles ‖.

The preparation of their victuals is ſo ſimple, that foreigners do not eaſily bring themſelves to reliſh it, but adhere to the cuſtomary way of dreſſing their food in their own countries. Freſh meats with watery ſauce, or baked paſties ♂ of common cruſt, with minced-meat, or whole fiſh, fiſh with water and ſalt, without other ſauce, cabbage and roots chopped together, cabbage-ſoup ε, which is never omitted, meagre fiſh and fleſh ſoups, cool-drinks θ, quas, with eggs, minced-meat, and leeks, pancakes ξ, ſoup of ground hemp and linſeed, millet-ſoup and grits, turned milk π with meal and ſour milk, &c. almoſt all ſeaſoned with onions, leeks, garlic, and ſometimes pimento, are their ordinary diſhes. Where Tartars dwell, they uſe likewiſe a few wild roots, eſpecially dog-tooth ϱ, lily-roots φ, and others. For the evening repaſt are

* Klopi. † Bloki. ‡ Dermeſtes lardarius Linn.
§ Pruſſak; blatta aſiatica. ‖ Blatta lapponica Linn.
♂ Piroggi. ε Tſchi. θ Badvina. ξ Blini.
π Kiſſel. ϱ Kandik; erythron. dens canis Linnæi.
φ Sarana; lilium martagon Linn.

ſerved

ſerved up nuts, orchard-fruits, and the ſeveral wild fruits produced by the country round; blackberries, ſtrawberries, ſloes, &c. At an entertainment of their friends and acquaintance they provide a ſurpriſing variety of theſe kinds of diſhes. The lower ſort feed very poorly at all times, but particularly in the faſts. In large towns, the table in good houſes is becoming more luxurious and faſhionable from day to day.

The moſt common domeſtic drink is quas, a liquor prepared from pollard, meal, and bread, or from meal and malt, by an acid fermentation. It is cooling and well-taſted. Corn-ſpirits *, and rectified corn-ſpirits †, ſupply the place of wine. In good houſes, fruit-wines, raſberry-wine ‡, cherry-wine §, bilberry-wine ‖, &c. from the juices of thoſe fruits, mead and brandy made by fermentation, which are pleaſant enough to the palate. Brown beer and metheglin are more in uſe than braga or white cloudy beer brewed from malted millet or wheat, with hops, and buſa or white unhopped wheat-beer. Tea is in very general uſe. The true ruſſian tea ♪ is a concoction of honey, water, and ſpaniſh pepper, and drank warm. It taſtes well and cheers the ſtomach. Many even of the common people

* Vina. † Vodka. ‡ Malinofka.
§ Viſhnofka. ‖ Tſhernofka. ♪ Sbitin.

drink

drink chineſe tea, ſweetened with honey or ſugar. Perſons of diſtinction keep their tables ſupplied with meats and drinks entirely in the foreign taſte, hire french cooks, &c. as in other countries. Tobacco is but little uſed.

In the article of dreſs they adhere as faithfully, in the country towns and villages, to the manners of their fathers, as they do in food and lodging. The nobleſſe, all the officers in the civil department; and, beſides the light troops, the ſoldiery all over the empire, the merchants of the chief towns and thoſe who trade with them, the mine-owners, and almoſt all the people of quality throughout the empire, dreſs after the german faſhion; and the ladies, even in the remoteſt and moſt retired parts of the country, appear more modiſhly attired than would eaſily be imagined. The burghers and mercantile claſs, however, generally ſpeaking, ſtick cloſe to the national dreſs, no leſs than the peaſantry. Of this I ſhall ſpeak a little more particularly.

The men let their beards grow, which are commonly long and buſhy: the hair is cut and combed: their ſhirt * is ſhort, without any ſort of collar, and made of white, blue, or red linen. Their trouſers † are looſe, and tied below the knees. The ſhirt uſually hangs over the trou-

* Rubaſhka. † Stanni.

ſers,

ſers, and is girt round the waiſt with a ſtring. Stockings * are not ſo commonly worn by the lower claſs of people, as leg-wrappers †, which they tie about their feet and legs with packthread, ſo as to make them look very thick. Shoes ‡ are worn by the better ſort, and matſlippers § by the common people; but half-boots ‖ are in very general uſe. Over the ſhirt they wear a ſhort breaſt-cloth ♂, or a veſt furniſhed with buttons. The coat θ is made ſo big as to allow of one ſide lapping over the other before, with little buttons, cloſe ſleeves, and a collar. The ſkirt is made with gathers at the hips, and reaches below the calves of the legs, and the garment is girt round with a ſaſh that paſſes twice round the body. At the ſaſh ξ commonly hangs a long-bladed knife, in a ſheath. The covering for the head is either a flat fur-cap, with a narrow brim; or, in other places, a cap which forms a bag of a ſpan in depth, in which they keep their handkerchief on their head. In ſummer they go with flapped high-crowned dutch hats, ornamented with a narrow ribband of ſome gaudy colour. The materials of the dreſs vary according to the rank and circumſtances of the wearer; the rich wear fine broad cloth, ſome-

* Tſhulki. † Onutſhi. ‡ Baſhmaki. § Lapki.
‖ Sapagi. ♂ Fufeika. θ Sipoun. ξ Kuſhak.

times

times decorating the edges with gold cording, and little silver buttons for fastenings; common people clothe themselves in homespun cloth, and the summer in linen, made likewise at home. A well-dressed Russian makes a very good figure. In winter the common people wear sheep-skins, with the woolly side turned inwards; the better sort put on furs of a higher price.

The habits of the clergy, as well in their every-day wear, as when officiating at the altar, are in the oriental style; the latter of different colours, often in brocade, mostly very rich. The monks are always clad in black, and are also distinguishable by their high pasteboard caps, wound about with crape.

The women wear stockings or leg-wrappers, and shoes like the men, sometimes likewise picked-pointed slippers. The lower class frequently go barefoot, or simply in slippers on their naked feet: their shifts are white; but in Dauria the female peasants put on silk-coloured shifts of gauze or cotton: they fasten about the neck with a collar, and are decorated with fancied ornaments of needle-work: the vest * is close about the neck without sleeves, and sits tight to the body down to the hips; from the hips it spreads without gathers and reaches down to the

* Saraphan.

ſhoes; on the facing it is garniſhed with a thick row of little buttons from the top to the very bottom; it is however girt with a ſaſh, to which the bunch of keys is ſuſpended. The quality of the ſaraphan is various according to circumſtances: of glazed linen, kaitaka, ſilks, frequently edged with fur, or lined with it throughout. The dreſs of the lower ſort of females in winter is more complete, conſiſting of coarſe cloth, or ſheep ſkin, with ſleeves. Another dreſs is the uſual woman's gown, and a contuſhe without ſleeves *. The duſhagrek is alſo worn on the ſaraphan, without a gown. In the winter they wear furs made after the manner uſed in Poland, with pointed ſleeves. As this is uſually a preſent made by the bridegroom, and the beſt piece of dreſs, the common people, in order to make a ſhow of it, go, the whole ſummer through, to church, to make viſits, &c. in the pelice. They alſo wear necklaces of corals, pearls, or golden chains, ear-rings of precious ſtones, and decorate their fingers and wriſts with rings and bracelets.

The head-dreſs is ſomewhat different in different diſtricts. The girls in general wear their hair uncovered more than the women; the former plait it in three plaits, with ribbands

* Duſhagrek.

and

and beads tied to the points of them. In Tver, Novgorod, &c. they wear a band acroſs the forehead, bedizoned with pearls and beads of various colours, which gives the appearance of a tiara or open coronet. At Voronetz and the parts adjacent, both women and girls wear coifs made to fit the head, with cheek-pieces and treſſes. About the Oka, at Murom, and the country round, the caps are in the form of an upright creſcent. In the governments of Moſco, Yaroſlaf, Kaluga, and the circumjacent parts, the coif has a ſtiff flap before, like a jockey-cap, which is decorated with treſſes, pearls, and various-coloured ſtones. On this they hang in the tartarian faſhion, a veil; but which they uſually keep thrown back. The veil is generally of ſilk, ſet off with gold or ſilver lace. In their ordinary dreſs, they tie on the veil over the hair, without any cap. In weſtern Ruſſia caps are in uſe that are a kind of fillet, with treſſes, pearls, and ſtones. Numbers wear caps having a ſtiff rim one or two inches broad, like a ſmall ſkreen or a flapped hat. Perſons of conſequence, in towns, wind pieces of ſilk about their heads in ſuch manner to let the hair hang down in ringlets from under it; and theſe head-dreſſes have very much the reſemblance of a high turban.

ban. A complete woman's attire is very dear, but remarkably handſome.

Paint * is as neceſſary an article in the dreſs of a ruſſian lady, as linen. The freſheſt and ruddieſt young woman of the place puts on both white and red; and, as this practice is prejudicial to natural beauty, therefore ſuch antiquated dames as would not appear hideous are forced to continue it. Fine white paint is made of pulverized marcaſite; more commonly white-lead †. The rouge in the ſhops ſeems to be compounded of florentine-lake and talc, with powder of marcaſite; red tiffany is alſo very much worn. The village-toaſts gather the roots of onoſma echioides Linn. or of lithoſpermum arvenſe, which, after being dried, they moiſten with their tongue, and then rub their cheeks with it; or they extract the colour with boiling water and alum from the rind of theſe roots. Some rub their cheeks with river-ſpunge ‡, till the ſkin is ſufficiently thinned or inflamed for being tranſparent to the blood. From the toilet, however, we we will now retire with awe, and preſume no farther to pry into its myſteries.

The Ruſſians are a race much hardened by climate, education, and habits of life, having

* Rumiana. † Belila. ‡ Badiaga; ſpongia fluviatilis.

their

their own peculiar uſages, which have a greater affinity with the aſiatic than the european, only without the effeminacy. They ſleep on the floor, the hard benches, or the boards placed ſhelf-wiſe for that purpoſe; in the ſummer contentedly lying down in the open air, in the field, or the yard of the houſe, as they do in the winter on the top of the oven, without beds, or merely on a piece of felt, ſometimes with and often without any pillow, either under a thin covering or in their clothes. After performing their evening devotions, accompanied with frequent proſtrations and croſſings, before the ſacred figures of the ſaints, they betake themſelves early to reſt, and riſe again betimes in the morning, waſh themſelves, renew their pious oriſons, and proceed with alacrity to buſineſs. Into the houſes of the great and opulent, even at a diſtance from chief towns, feather-beds and late hours, with other luxuries, have long ſince found their way.

Whenever acquaintance meet together, their term of greeting is, Zdravſtvui *! or ſometimes, Zdarovui †! accompanied with ſhaking of hands, taking off the cap, bowing, and often with kiſſing

* Which may be rendered, All hail! or God ſave thee! or Good betide thee! — Salve! Sit ſaluti!

† Health! — Soſpes! Sanus!

which is much in practice with both ſexes. Even the loweſt of the people greet one another with great civility. Inferiors kiſs their ſuperiors on the breaſt, and of people ſtill more elevated above them they kiſs the border of the garment; and, when the difference is very great, they fall down and ſtrike their forehead upon the ſhoe of the great man. When they have any thing to requeſt, they aſſume a tone and geſture, as if they were imploring mercy. It is indecorous to ſpeak loud in the preſence of ſuperiors; and if any one happen to do ſo, he is preſently chid by the by-ſtanders, with * Do not bawl! When a man deſigns to honour his gueſts, he lets his wife and daughters appear, full-dreſſed, who kiſs the gueſts, and hand them what they want at the entertainment. They ſeem to vie with one another in the profuſions of hoſpitality. Old age is univerſally honoured. On the breaking up of company, they depart, ſaying, Proſhai †! never omitting the valedictory kiſs. On the ſlighteſt interruption or alteration to the ordinary courſe of whatever they are about, at eating, drinking, ſneezing, at a ſudden ſtart, at the ſight of a particular place, of a church, &c. they make the ſign of the croſs

* Nekritſhi. † Farewell.

with

with the fingers, on the forehead, the ſtomach, and the two ſhoulders, bowing ſeveral times, and adding, with a deep-fetched ſigh: The Lord have mercy *!

They have uſually two meals in the day; in the forenoon about nine o'clock, and in the afternoon at three. The family at theſe times eat all together; and, when it is numerous, firſt the males and afterwards thoſe of the other ſex. They allow themſelves but a ſhort time at table, and are eaſy and cheerful. Even among the inferior people the table-linen, platters, and veſſels are kept in great cleanlineſs. If ſtrangers ſit down with them there are very copious potations. Intoxication is not diſgraceful, and even among people of good condition, if a lady be overtaken in liquor, it is no ſubject of reproach. They are never quarrelſome or ſcurrilous in their cups, but friendly, jovial, courteous, ſpeak in praiſe of the abſent, and boaſt of their friendſhip; and thoſe that are not able to ſtand, find ready aſſiſtance from thoſe that can. On journies, merchants and others take their food with remarkably few formalities. In towns and great village-ſtations, women ſit in the ſtreet, near public-houſes, with tables having roaſt and boiled

* Goſpodi pomilui!

meat, fiſh, piroggees, cabbage-ſoup, cucumbers, bread, and quas, conſequently a ſuperb and every where a cheap repaſt, which is taken ſtanding, and always accompanied with a glaſs or two of brandy.

Holidays * are kept in idleneſs and wanton jollity. No one neglects to keep his birth and name's day, and thoſe of his family. The day is opened by devout attendance on maſs; then the perſon whoſe feſtival it is gives an entertainment of the beſt he can provide to his friends, who, to ſhew their attention to him, preſent themſelves uninvited at his houſe. The poor make their maſters and patrons a preſent of a loaf of bread, a few apples, or ſome trifle of that ſort, in order to get a return in money to enable them to entertain their friends, which they faithfully employ to that purpoſe, and generally finiſh the day with a hearty drunken-bout.

To hot and cold bathing they are ſo habituated from their earlieſt infancy that the practice is indiſpenſable. They uſually go into the hot-bath once a week, beſides other frequent occaſions, ſuch as, after a ſlight indiſpoſition, hard work, on returning from a journey, and the like. They uſe the bath very hot, heating the room with large ſtones made glowing red, and

* Praſniki.

raiſing

raiſing a vapour by repeatedly throwing water upon them; the room all the while being ſo tight that no particles of heat or vapour can tranſpire. The bather lies extended naked upon a mat thrown on one of the ſhelves of the ſcaffold already deſcribed, which the higher he aſcends the greater the heat he feels. When he has thus lain perſpiring for ſome time, the waiter of the bath, generally a female, comes and waſhes his body all over with hot water, ſcourges and rubs him with bunches of leafy birch, wipes him with cloths, and then leaves him to lie and ſweat as long as he chooſes. Numbers of them run from the hot bath into the cold water flowing by, and in winter roll themſelves in the ſnow, without deriving any bad conſequences from it.

Oaths and curſes are but little in uſe: by God*! is their commoneſt aſſeveration. Obſcene and ambiguous, abuſive and ludicrous expreſſions are very uſual among them. Flattering terms are in great uſe; for inſtance, to an elderly man, Batuſhka, good father; to an older man, Deduſhka, good grand-papa; to a matronly woman, Matuſhka, good mother! which term is even uſed to the empreſs; to a girl, Duſhinka! my little ſoul! to a boy, Golub-

* Ye Bog!

tſchick! my little dove! &c. Good brother * is moſtly uſed towards inferiors. Perhaps it may be better made in Engliſh, by Good friend! or honeſt fellow!

The intercourſe between the ſexes is more free than elſewhere, particularly in the country, on account of the contracted ſpace of their habitations and ſleeping room, their baths, the ſimplicity of their converſation, and their artleſs ſongs. The behaviour of huſbands toward their wives is, in general, comparatively with european manners, rough and auſtere. The wives muſt work hard, and are often obliged to be the tame ſpectators of their huſband's intemperance and irregularities without daring to complain; but to this they are ſo early accuſtomed that they are ſeldom heard to vent a murmur even while ſmarting under very tyrannical treatment. In larger towns, however, and even among people of condition, the lady is in a quite contrary predicament; and they are either very much ſlandered or many a kind huſband ſometimes gets a rap of the ſlipper. It is a maxim with parents of the common claſs, never to become dependent on their children; and therefore keep the management of the houſe

* Bratetz.

in

in their own hands, till they die. Indeed the laws of the land are more favourable to widows and mothers than they are in other countries.

With ſubſtantial people the marriage-contract is made with mercantile punctuality; the common ſort enter into the nuptial ſtate, for its peculiar purpoſes, as young as they can; and, as houſekeeping is not expenſive, and as education is neither attended with coſt nor trouble, they live as much at their eaſe as before. The betrothing is performed with eccleſiaſtical rites, generally eight days previous to the marriage, and is indiſſoluble. During this interval, the bride is only viſited by the bridegroom, and the girls of her acquaintance, who amuſe her with ſinging. On the laſt evening the young women bring the bride into the hot-bath, where they plait and tie up her hair, all the while ſinging ballads deſcriptive of her future happineſs.

The marriage is ſolemnized in the church, before the altar, whither they proceed, with the figure of ſome ſaint carried before them. During the ceremony a crown is put on each of their heads. The prieſt, with due forms, changes their rings, reads to them an admonition of their reciprocal duties, gives them to drink of a cup in token of the preſent union of their fortunes, and diſmiſſes them with his bleſſing.

At their return from church the father of the bride preſents the young couple with a loaf of bread and ſome ſalt, accompanied with a wiſh that they may never know the want of either, for which they thank him on their knees. They then ſit down to ſupper, and when the ſhift that the bride is to put on has been inſpected, the new-married pair are put to bed. This ſhift is produced the next day to the gueſts, who, upon ſeeing the tokens of virginity upon it, felicitate the mother of the bride on that fortunate event. All things conſidered, it need not be mentioned that theſe tokens never fail to appear. This day paſſes with far more jollity than the former, as the young woman, being now freed from all reſtraint, can bear a part in the ſports and entertainments of the company.

The national diverſions of the Ruſſians on holidays, at weddings, and other occaſions of feſtivity, are very diverſified, and have great reſemblance with thoſe cuſtomary among the Perſians, the Arabians, and the Ægyptians. Their muſic is more uſually vocal than inſtrumental. On the whole globe we ſhall ſcarcely meet with a country where there is more jovial and uniform ſinging than in Ruſſia. They all ſing from the child to the hoary head of age, and on all occaſions, old women excepted, even

while

while at the moſt laborious and toilſome work, and generally with all their might; the country-roads re-echo with the ſongs of the drivers, the village-ſtreets with the merry voices of the girls, and the drinking-houſes are never without a concert. Their ſongs are ſimple recitations, antient or modern; on the ſubject of love, nature, and tales of chivalry, giants, and heroes, frequently lewd, and their melodies uniform and monotonous, but ſometimes pleaſing enough. The little groups of girls ſitting together of an evening and ſinging * are very entertaining. The men ſing, from the fullneſs of their hearts, exploits of ſoldiers or kozaks in time of war, or a thouſand other ſubjects that will ſuit their own ſtyle of compoſition and their own tunes and their thoughtleſs merry diſpoſitions, reciting ſingle words or lines from different ſongs, in every tune and for whole hours together.

The moſt complete vocal muſic is what we hear in their churches on ſundays and holidays; which, as the church allows of no inſtrumental muſic in divine worſhip, is performed by ſingers expreſsly taught, moſtly brought from the Ukraine for the principal churches, and gives great ſatisfaction even to people of taſte. The ſubſtance is ſlavonian poetry; the notes † are ex-

* Igriſhi. † Irmelogies.

preſſed

preſſed by points, after the very old faſhion, for four voices. The preſent choral muſic is moſtly by Mottete.

The moſt common and the moſt peculiar inſtrument of the nation is the cow-horn. It is a cornet of from one to four feet in length, of wood or tree-bark, from which the ſtout lungs of a boor can produce a ſound ſomewhat ſimilar to the human voice. The balalaika, of the bandour kind, of very antient ſlavonian origin, is a common inſtrument both with the Ruſſians and Tartars; according to Niebuhr it is alſo much uſed in Ægypt and Arabia. The body of it is an oblong ſemicircle, about a ſpan in length, with a neck, or finger-board, of four ſpans. It is played on with the fingers like the bandour, or guitar; but has only two wires, one of which gives a monotonous baſs, and by the other the piece is produced. Under the touch of able fingers, accompanied by a good voice, it founds agreeably enough; and therefore it is not unfrequently ſeen in the hands of people of faſhion. The gudak is a miſerable violin with three ſtrings, which are all touched by a ſhort bow, though only one of them is fingered: it is not pleaſing to every ear. The dutka conſiſts of two parallel reed-pipes, each with three holes, differing in their notes up to an octave, ſo that it ſtrikes the

hearer as if two were played on it. On this antiquated inſtrument only ſimple tunes can be produced. The rilek is a common village-lyre; and the valinka a diminutive pair of bagpipes. The guſli is a horizontal harp with wires, played on with the fingers, and is competent to any piece of muſic. As it is a pleaſing inſtrument even without the accompaniment of the voice, it is much in requeſt at the tables of country-noblemen, the overſeers of the mines, and others. The cornet * is chiefly in uſe among the ſailors and boatmen for aiding their voice in ſinging, as they reſt upon their oars in falling down the current of the rivers, and in ſhort when they have nothing better to do. It is rather a kind of ſhawm, of birch-bark, with ſix finger-holes, and a mouth-piece like that of a trumpet. The ſailors make a jingling noiſe with two bunches of little bells, in time with their muſic.

Dancing † is a diverſion every where followed. Even the common people, who here are not apt to become ſtiff with work, dance to admiration. They generally dance to the voice. The univerſal dance of the country conſiſts in frequent genuflexions of the man, and a gentle ſtep in proper cadence of the woman. It is pantomimic and very engaging.

* Raſhok. † Dantzavat.

The

The woman lays her arms on her breaſt croſſ-wiſe, beckons to the man with her fingers, ſhrugs her ſhoulders, and glides by him hanging down her head, with ſome ſide-glances, without giving of hands. In another dance, the man and woman ſhew a repugnance to each other; they reciprocally paſs by with averted and diſdainful looks; make faces of deriſion at one another as their backs are towards them; turn about and ſhew by their looks and geſtures an ambiguous averſion. The dove-dance * exhibits an imitation of the coaxing airs of turtle-doves or lovers. Generally one ſtands ſtill to the other; preſently the man dances about with vehement motion, while the woman proceeds in gentle and delicate movements. Poliſh dances are alſo much in uſe, not only in the Ukraine, but in moſt other parts of the country, likewiſe during the winter evening-companies † are very common. They conſiſt in abſurd and ridiculous maſquerades by young people. They ſometimes, though but rarely, put on diſguiſes, humorouſly repreſent groteſque and romantic ſtories, imitate particular perſons and animals, and uſually indulge themſelves in coarſe and licentious buffooneries. After theſe comedies, or maſquerades, which are ſometimes omitted, the party amuſe themſelves with ſing-

* Golubetz. † Vetcherinki. Igriſtzi.

ing,

ing, dancing, playing for ſtakes, and always with eating and drinking.

They are very much attached to gymnaſtic diverſions. In ſevere winter-nights the ladies make ſledge-parties, in which there is always much vehement ſinging. The ſwing and round-abouts are diverſions of the eaſter holidays. The former is carried to great perfection; five or ſix people ſtand or ſit, one behind another on a plank, which is ſwung to a great height. Inſtead of a plank, ſome of theſe ſwings have wooden lions, ſwans, bears, coaches, chairs, ſofas, &c. The girls divert themſelves in ſummer in jumping on a board, reſting in the middle on a block of wood as a fulcrum; one ſtanding on each end of this board, they alternately bound one another up to a ſurpriſing height. The diverſion of the ice-hills has been deſcribed in a former ſection of this work. Wreſtling and boxing * are another diverſion, though very awkwardly performed. Ringing the bells, on church and court holidays, is a ſpecies of exerciſe of which they are remarkably fond; but they produce nothing like harmony from them. The ſole excellency conſiſts in ſtriking the clappers the oftenеſt.

* Kulaſhnoi boia.

In

In the country the women are generally delivered in the bath-room, and the births are for the moſt part happy and eaſy. The prieſt uſually gives the child the name of the ſaint that ſtands on the day in the church-kalendar. Every one on viſiting the lying-in woman kiſſes her, and privately ſlips a preſent in money under her pillow. Dependents make uſe of theſe opportunities for complimenting their ſuperiors, who do not accept of preſents.

A careleſs diſpoſition, and a way of life naturally auſtere, an exemption from very toilſome labours, and the uſe of the bath, but eſpecially a clear and bright atmoſphere, peculiar to Ruſſia and Siberia, keep them in conſtant health, generally to a good old age. Even the ſick have ſeldom recourſe to medicine. The country has but few, and no violent diſeaſes peculiar to it. Sometimes in ſummer a ſort of phthiſicky complaint * appears, eſpecially in the parts bordering on the Irtiſh, affecting both men and cattle. It firſt ſhews itſelf by a bile on ſome part of the body; and though mortal without help, is not contagious. A certain cure has of late been diſcovered for it, by making an inciſion in the bile, quite into the ſound fleſh, and then dreſſing the wound with tobacco and ſal ammo-

* Yaſſua.

niac.

niac. In the confines of the upper Lena, ſwelled-necks are common; young perſons, however, in places that have better water, eſcape them. About the Caſpian they are ſubject to a horrid, ſlow-conſuming, mortal leproſy, called the Krimean-diſeaſe *, alſo the Black-ſickneſs †; but this is not frequent.

Several of their domeſtic remedies, require a patient fortitude truly heroic. A mixture of garlic, onions, and ſpaniſh pepper, with brandy, is an univerſal medicine for all diſtempers. Venereal complaints, which are ſo very common, are here but little infectious, and not frequently even by coition are cured, without any preparation, by mercurial ſublimate, verdegris, and vitriol, kneaded and baked in bread-cruſt; nevertheleſs great numbers retain injuries from it for the reſt of their lives, and not a few fall early victims to death. Wolf's bane ‡, and ſneeze-wort § are taken againſt almoſt all accidents, in large doſes by eye-meaſure. Moxa ‖ of mug-wort-flocks, are often burnt on the belly for pains of the bowels, and on the joints, for aching bones.

The dead are ſincerely and long lamented by their relations and friends; but, from a natural

* Krimſkaia boleſna. † Tſhornaia nemotſh.
‡ Aconitum lycoctonum Linn. § Veratrum.
‖ Yadtin.

repugnance

repugnance to the idea of death, they uſe but little ceremony with the corpſe. They put on it a ſhrowd, then lay it in a coffin, in which it is brought, open, only covered with a pall, to the grave, attended by prieſts, chanting hymns, and bearing croſſes and lighted tapers in their hands. Being come to the place of interment, the attendants take leave of the body by a kiſs, give it a bleſſing, then faſten up the coffin, let it down into the grave, and ſhovel in the earth. On theſe occaſions the nobles and the rich put on black, but others make no change in their dreſs. The lower ſort bury their dead in their ordinary clothes. Such as die on the barks upon the rivers are taken to the ſhore by their companions, and there put in the ground, without any other ceremony. Great funeral feaſts and mourning in black clothes are not cuſtomary; among the few diſhes they ſerve about, one is uſually a frumenty of ſoaked wheat, in reference to the paſſage concerning a ſprouting wheat-corn in John, xii. 24. In great towns the funeral obſequies are conducted, among people of condition, as they are in other countries.

At the new year is annually held a feaſt of the dead *, on which every body viſits the grave of

* Raditeli ſabol.

his

his relations, lays some victuals upon it, and hears mass, in payment for which the priests get the victuals. Profligates, such as have come to a miserable end, and all who have died without the sacrament, were formerly thrown, without inhumation, into a hut for that purpose *, and, on the Thursday before Whitsunday †, were buried by the clergy, who said masses for their souls, attended by the inhabitants of the place. At present greater indulgence is shewn to these poor wretches.

The antient orthodox Greek religion, to which the whole nation is attached, is universally acknowledged in doctrine and discipline. We shall here speak only of its externals. The churches and the sacerdotal vestments are very magnificent. The people at large are very strict in the observance of the outward forms of worship, attendance on mass, keeping the fasts, (which take up one-third part of the year,) performance of domestic devotions morning and evening, confession, receiving the sacrament, &c. To build churches is a meritorious act; hence it is, that even the smallest towns have such a number of these structures, and some of them handsome. As, by reason of the severity of the winters, it is necessary to heat the churches, there are frequently two churches in one church-yard, a

* Bogdoi dom. † Sedinik.

winter and a ſummer church; at other times they conſiſt of two ſtories, uſed to the ſame purpoſes. The clergy are held in great honour, and are extremely tolerant towards all other profeſſions of faith. The titles of metropolitan and archbiſhop are not attached to the ſee, but are at preſent merely perſonal diſtinctions conferred by the ſovereign, which give the poſſeſſors no additional power, and ſcarcely any precedence. Every one, on meeting a prieſt, kiſſes his hand, in return for which he receives his bleſſing with the ſign of the croſs: this cuſtom is now, however, pretty much confined to country places. Paſſion-week is kept by every perſon in great apparent ſolemnity, with frequent ceremonies of devotion, to which they are invited by ſlow and diſmal ſtrokes of the church-bells: but the eaſter-week is paſſed pretty nearly as in ſome other countries, in various diverſions, drunkenneſs, and debauchery. At this feſtival it is the univerſal cuſtom all over the empire to preſent each other with an egg, accompanied with a kiſs, at the ſame time ſaying: Chriſt is riſen *! to which the other replies: He is riſen indeed †!

In ſuperſtitious notions and practices the Ruſſians are as little deficient as their neighbours.

* Chriſtos voſkreſt! † Voiſtinnoi voſkreſt!

Many of them, as well as among us, believe in ghoſts, apparitions, and hobgoblins, and are not fond of inhabiting the houſes of near relations deceaſed; whence it happens that many houſes are left to fall in ruins, or paſs into foreign hands at a very cheap rate. A houſe too, whoſe owner fell into poverty, or was otherwiſe unfortunate, will not readily find a purchaſer, becauſe it has ejected its maſter. On the Thurſday before Whitſuntide the girls celebrate the feſtival of the ſlavonian goddeſs Lada and her ſon Dida, with ſinging, dancing, and decorating a birch-buſh with garlands of ribbons; which they afterwards throw with great ſolemnity into a river, and learn, from the figures the ribbons aſſume in the current, who they ſhall wed, and what their fates ſhall be in marriage. On the 5th of January they go by night into a croſs-ſtreet or into a cellar, which is called, To go hearing *, and fancy they hear, in every ſound, the prediction of their deſtiny. The day after Chriſtmas is ſolemnized by the midwives, becauſe the virgin Mary's midwife had a great hand in the redemption of the world. In Perme, and other places, they believe that ſome witches, by their incantations, have the power of de-

* Sluſchit.

priving the female sex of their right to become mothers *, but that others can preserve it inviolably to them; therefore brides always apply to the latter. As wives are sometimes slighted by their husbands on that account, paramours find their advantage in this conceit. But to reckon up all the superstitious fancies of this nature would be both endless and unprofitable. Their domovois are our fairies, and their vodovois our water-goblins or wizzards of the stream. — But, to proceed with our historical sketch:

We have hitherto followed the principal clue of the russian empire, without concerning ourselves with the particular states into which Russia, during the period of its partition, was divided. None of these divisions left so many visible traces in the nation and in the political constitution, after its re-union, as the defalcation of the grand-duchy of Kief. Their origin from two stems, distinct though belonging to one nation, already separated the kievian from the novgorodian Slavi. Their destinies and their political condition have been since continually removing them farther asunder; and when the state of Kief, after a separation of more than three centuries, dissolved again into the russian mass, its inhabitants were still a very different people from their primitive

* Sportshini.

brethren,

brethren, in language, manners, and conſtitution. This difference ſubſiſts at preſent, notwithſtanding the political incorporation; and the two nations are ſtill deſignated by different names: the deſcendants of the novgorodian colony being now called Great-Ruſſians, and the kievian Little-Ruſſians. The former, in the proper acceptation, compoſe the principal nation *, and chiefly dwell in the old ruſſian provinces, though they have ſpread through all the conquered countries. The home of the Little-Ruſſians is the Ukraine, or the preſent governments of Kief, Tſchernigof, Novgorod-Sivirſk, Kurſk, Orel, Tambof, &c. and they are alſo called Kozaks, though in modern times theſe only form a particular claſs of the nation, and their conſtitution is now almoſt entirely effaced. — As, beſides the Little-Ruſſians, there are

* The Great-Ruſſians may be regarded as the main-nation: 1. becauſe the kievian ſtate became, ſoon after its origin, ſubject to the novgorodian; 2. becauſe the former, during the period of ſeparation, was under a foreign ſovereignty, whereas the great-ruſſian ſtate in part preſerved its independency, and, under the ſupremacy of the Tartars, had an uninterrupted ſucceſſion of native princes: 3. becauſe Kief, on its re-union with the ruſſian body-corporate, ſubmitted to its ſovereignty: 4. becauſe the Great-Ruſſians are by far the moſt numerous, and their dialect is the prevailing language.

other branches of the Kozaks, and theſe tribes, notwithſtanding their manifeſt ruſſian origin, being very diſtinct from the proper Ruſſians by their mixture with other nations, and by their peculiar conſtitution, it is neceſſary to point out the eſſential particulars of their origin and circumſtances.

By Kozaks, in its largeſt ſenſe, is underſtood original ſeparate ruſſian ſtems, who ſettled in the ſouthern regions of modern Ruſſia and formed for themſelves a military government. The name Kozak is probably tartarian, and ſignifies an armed warrior. It is likely that it may have paſſed from the Tartars to the ruſſian Kozaks, when the latter, after the demolition of the tartarian ſovereignty, ſettled in their ſeats and adopted a ſimilar mode of life *.

The

* The emperor Conſtantine Porphyrogenneta, ſo early as the ninth century, mentions a country of *Kaſachia*, between the Euxine and the Caſpian, at the foot of the caucaſian mountains; and, from the ruſſian year-books, we learn, that the ruſſian prince Mſtiſlaf at Tmutarakan, a ſon of the great Vladimir, in the year 1021 made war upon a nation called *Koſagi*. Both ſeem to be the ſame people, and of tartarian origin. They got their name probably from their mode of life, as the Kirghis-Kaiſaki bear the ſame appellation from their eaſy method of carrying on war. The ruſſian annals frequently mention the tartarian Kozaks,

The Kozaks, by reaſon of their federal conſtitution, military and civil, form a diſtinct part and claſs of the nation. This conſtitution they obtained after the demolition of the tartarian empire, when the government appointed them the guardians of the new frontiers, and allotted certain diſtricts of the country for their ſupport. They had their name from the tartarian Kozaks, which conſiſted of a band of refractory people. At preſent they are the irregular and country-troops, and are compoſed of various, diſtinct, conſiderable, bands or regiments.

Kozaks, eſpecially under the reign of Ivan I. in whoſe time there were *Ordinſkoi* (from the great Orda or Horde, the chief ſeat of the Tartars on the Volga) and *Azofſkoi* Kozaks. Theſe two branches are to be conſidered as the laſt remains of the tartarian ſovereignty in Ruſſia, and even theſe are either exterminated by the Ruſſians, or have themſelves diſperſed, and united with other tartarian nations. — In their ſtead aroſe the *Don-kozaks*, who, notwithſtanding this connection and the apparent analogy of their manner of life, political regimen, and features of face, are genuine Ruſſians, as their language and religion evince. Had they been converted to the latter, the ruſſian annaliſts, who carefully take notice of every converſion, would certainly not have paſſed it over in ſilence. *Sammlung ruſſ. geſch.* vol. iv. Compare with *Hupel's nord. miſcell.* part 24 and 25. *Annales de la Petite Ruſſie, par Scherer. Georgi's deſcription of all the nations of the ruſſian empire.*

The internal conſtitution of the ſeveral Kozaks, though in complete ſubordination to the ruſſian ſupremacy, whoſe ſubjects they are in the ſtricteſt ſenſe of the word, is at once military and democratic; with the Malo-ruſſians the military eſtabliſhment is more regular. The Kozaks have no nobility, conſequently no vaſſals: all are brethren, and may reciprocally command and obey, without reproach or farther conſequence. They elect their ſuperiors from their own body, reduce them again to the common level, and chooſe others in their ſtead: the commander in chief alone is appointed by the government, whoſe concurrence is alſo neceſſary to his being depoſed. All the commanders are in conſtant pay of the crown; but the common Kozaks only when in ſervice. They are obliged always to clothe themſelves at their own expence, (the ſiberian Kozaks excepted) to provide themſelves with horſes and arms; conſequently, at all times to be completely ready to march: while in actual ſervice each common man receives the munition and the pay of a ſoldier, 12 rubles per annum; the pay of the officers is in proportion. They enliſt their young people into the ſervice at the age of 18, and give them their diſcharge when turned of 50.

Their

Their commanders, as countrymen, are called in the villages elders, or aldermen *, and over towns and diſtricts, attamans, corruptly hetmans. As militia, they have ſubaltern officers over tens and fifties †; captains over hundreds ‡; enſigns § ; ſcribes ‖; adjutants ∂; and every regiment θ, which, according to the extent of the diſtrict, is from 1000 to 3000 men ſtrong, has a general-officer ξ; but the whole diviſion or claſs of the Kozaks is under the command of a generaliſſimo φ. All the officers, up to the attaman, are without rank, and may be under the ſubalterns of the army. In the two laſt turkiſh wars, however, all the officers of ſome regiments, and of others ſuch as diſtinguiſhed themſelves by their bravery and conduct, obtained the rank of officers of the regular militia. Since that time they have ſeveral attamans, and others, who are ſtaff-officers. The obedience of the common men towards their ſuperiors, eſpecially when they are at home, is very trifling, and regards more the circumſtances of fortune, and the confidence they have in their commander, than the poſt he fills. The officers, however, may puniſh petty offences by pecuniary mulcts

* Starſhini. † Deſiatniki and piætideſetniki. ‡ Sotniki. § Chorunſhi. ‖ Piſſari. ∂ Yeſſauli. θ Polk. ξ Voiſkovoi attaman. φ Glavnoi attaman.

to

to the regiment-box, by disgrace, or by the scourge.

Besides an exemption from the capitation-tax, the Kozaks enjoy several other privileges, according to circumstances, in their particular districts; such as, the liberty to fish, to hunt, to get their salt from the lakes, to distil brandy, &c. without paying for it. This maintains their families, when they are in the field; and, in long intervals of peace, enriches the industrious.

Every Kozak must keep two horses, when in service, and clothe himself in the polish or oriental fashion, but the quality and colour of his dress is left to his own choice; therefore, on mustering-days they make a motley appearance. Their weapons are: a lance, headed with iron, about a span long, with a shaft of three yards and a half in length, a sabre, a firelock, carabines, or pistols, or, only a bow and arrows. All bear lances, which, when on horseback, by means of a slip thong, they sling to a rest in the stirrup, on their arm, or on the pummel of the saddle. Of the other weapons some have one sort and others another. Some are without sabres, and others without fire-arms. Those that are provided with the latter, bear a cartouch-box over the shoulder, which is replaced by a quiver with such as carry the bow. The lance is generally decorated

decorated with a bit of a ſtreamer juſt below the iron head. The whip *, being a plaited leather laſh an ell long, and as thick as one's thumb, faſtened to a ſhort ſtick, may alſo be reckoned among their weapons, ſince, beſides exerciſing it upon their horſes, they fall upon an unarmed enemy with it, making very ſenſible impreſſion. Their ſaddle is merely a wooden frame, under which they lay a piece of felt for ſaving the ſkin of the horſe, and on it a leather cuſhion, in compaſſion to their own. The Kozaks are always expert riders, and their miſerably-looking horſes are well taught, and perform wonders. Each polk, or regiment, has two or more banners of ſilk, cut to a couple of points by a pyramidical fiſſure, on which is painted the figure of ſome patron-ſaint, with arms, &c. They have no drums or martial muſic.

On their expeditions they are very light; no artillery, no tents, no baggage, forage, and ſtore-waggons. A piece of felt is their tent, their cloak, and their bed; the proviſion is carried by the ſecond horſe; and, wherever they find any thing that their horſes can eat, they always make bold to take it for them. Againſt regular troops they are not eager to contend; but upon ſuch as are leſs diſciplined they ruſh

* Kantſhu.

with

with great impetuoſity; in attacking the baggage and magazines, in forcing contributions, and the like, they perform miracles. In the late turkiſh wars ſome polks behaved ſo well, that, in reward for their ſervices, they were clothed in uniform, and their officers received rank and portépées, and on ſome the empreſs beſtowed military orders, and gold-medals to be worn as marks of her favour. According to their original deſtination, they are ſtill chiefly employed in guarding the lines or frontiers, a part of them in forts and ſtanitzes, and another part during ſummer in the ſteppes, where they encamp in tents or in huts made of buſhes or clay.

The Kozaks are divided, as well by their origin as by their preſent conſtitution, into two main branches; the *Kozaks of Little-Ruſſia*, and the *Kozaks of the Don*. From the former are derived the ſlobode-regiments in the government of Kharkof, and the Saporogians; from the latter the volgaiſki, the grebenſki, the orenburgſki, the uralſki, the ſibirſki, and ſeveral other branches of Kozaks.

The grand-dukedom of Kief was, ſince Oleg transferred thither his ſeat from Novgorod, the capital of the ruſſian nation; and continued to be ſo till the year 1157, when the grand-duke Andrey Yuryevitch Bogolubſkoi choſe Vladimir for

for his reſidence. From that time forward, though Kief had its own princes, yet this continued no longer than till the year 1240, when the Tartars conquered Kief and deſolated the whole country. Eighty years the tartarian dominion laſted, during which this grand-dukedom retained its native princes, but they were under the arbitrary orders of the Tartars, and were obliged to divide their ſovereign-rights with the tartarian viceroys. From this ſupremacy, which left the country ſtill ſome ſemblance of an independent conſtitution, Kief fell in 1320, under the dominion of the lithuanian prince Gedimin, who defeated the laſt grand-duke Staniſlaf, placed a viceroy in his ſtead, and in his conduct towards this unhappy country, acted from no law but that of the conqueror.

At this æra we are probably to fix the origin of the MALO-RUSSIAN Kozaks, or Kozaks of Little-Ruſſia. The dread of a foreign ſovereignty which ſeemed to announce itſelf by unuſual ſeverity, may be reaſonably ſuppoſed to have given riſe to this military republic. A multitude of fugitives, who had abandoned their country, collected themſelves together in the lower regions of the Dniepr, where they ſoon began to form a petty ſtate. The perpetual incurſions and conteſts to which they were ſubject from their neighbours

neighbours the Poles, the Lithuanians and Tartars obliged them to adopt a military form of government. Their numbers were increasing considerably, when Kief, for the second time, in 1415, was ravaged by the Tartars; and, lastly, on this grand-dukedom being entirely with Lithuania incorporated into the polish state, and the kings of Poland, and the inhabitants suffering still greater hardships and oppressions than before, many of them again fled to the new colony which had now assumed the name of Little-Russia, in order to distinguish themselves from the great russian empire. By insensible degrees they now spread as far as the Bogue and the Dniestr, and possessed the whole country included by these rivers and the Dniepr. Villages and towns sprung up in which the Kozaks passed the winter with their families; all the effective men roaming about the steppes during the summer, and, like the knights of St. John, perpetually engaged in petty wars with the Turks and Tartars *. These circumstances rendered them a barrier to the kingdom of Poland against these enemies; the rise and progress of the new free-state was therefore not only not impeded on the

* So early as towards the latter end of the sixteenth century, the Kozaks subdued a part of the Krimea, captured Trebisond, and made military campaigns to Constantinople.

part

part of Poland, but even fostered and encouraged in various ways. King Sigismund made over in perpetuity to the Kozaks, in 1540, the countries lying above the cataracts of the Dniepr. Stephen Battori put them upon a regular military footing, gave them a hetman or supreme commander, and granted them likewise considerable districts *. His successors, however, departed from these prudent measures; they forbad the Kozaks to quarrel with the Turks, without considering that they thus destroyed the fundamental policy of this warlike state; Poles forced themselves into the country and took possession of the principal offices; the greek clergy, in short, were obliged to renounce the patriarch of Constantinople, and to acknowledge the spiritual supremacy of the pope.

* The sixth hetman, prince Bogdan Roschinsky, had a grant of the town of Terechtemirof, which from that time became the capital of the Kozaks, which had hitherto been Tscherkassy. The Kozaks obtained permission to inhabit the whole region from Kief to Terechtemirof, and on the eastern side of the Dniepr their former possessions were enlarged by a tract of country of 120 miles in extent. Thus Stephen had the prudence by this piece of policy in some measure to subject the Kozaks to him. His successors profited by this dependence, till at last the mutual relations of the two states, which had arisen from protection on one side and gratitude on the other, degenerated into oppression and rebellion.

These

Theſe and numberleſs other oppreſſions at length brought on a tedious war, proſecuted with various ſucceſs, and terminating on the part of the Kozaks with their throwing off the ſupremacy of Poland, and ſubmitting themſelves formally to the tzar of Ruſſia. This ſubmiſſion took place in the year 1654, under the hetman Bogdan Chmelnitzki, and this example was ſoon followed by all the towns and inhabitants on the eaſtern ſide of the Dniepr, with Kief. Thus at length was Little-Ruſſia and the antient mainſeat of the ſlavo-ruſſian nation, after a ſeparation of 334 years, again united with the main body of the ruſſian monarchy. The events of this country, from that period, fall in with the hiſtory of the ruſſian empire. The name Little-Ruſſia indeed ſtill ſubſiſts; but the form of its government, its kozak eſtabliſhment, and the nation itſelf have undergone great alterations, which have only ſome veſtiges of its former difference.

The Malo-ruſſians are ſomewhat different in their manners and way of life from the other nations, and are therefore conſidered as a particular people.

Their country poſſeſſes every advantage favourable to a numerous population; a mild climate, arable plains, partly indeed ſandy, but moſtly fertile,

fertile, few mountains, waters abounding in fiſh, and a ſufficiency of foreſts.

The Malo-ruſſians, in the year 1240, fell under the yoke of the Tartars; from whom they were conquered by the Lithuanians in 1320, during their ſubjection to whom, they probably formed themſelves into Kozaks; and in 1471, they were reduced under the dominion of the Poles. At that time they all dwelt beyond the cataracts of the Dniepr, and were therefore called Zaporogians, which appellation was afterwards limited to a diſtinct troop of them; in 1654 they ſubmitted, after a tedious war with the Poles, to tzar Alexey Michailovitch, and from that period have ever continued under their antient maſters.

Their intercourſe with the Poles has given them ſomewhat of a poliſh and ruſſian mixture in their features and look, a mingled ſet of manners and cuſtoms, and their ſpeech a poliſh dialect. Indeed they are ſo blended that their original character is loſt: diſſembling, induſtrious, and active; friends to the pleaſures of love, of the bottle, and vociferous mirth.

The nation is diſtributed into nobility, militia, burghers, and boors. The nobility are deſcended partly from renowned warriors; but moſtly from the poliſh nobility and others that remained among them. They may poſſeſs eſtates and

vaſſals, pay no perſonal taxes, and can enter into the ſervice.

The military claſs is the principal; and, ſo long ago as the reign of king Stephen of Poland, procured a diviſion of the country, not into provinces, but according to regiments. Theſe at preſent are Kief, Starodub, Tchernigof, Neſhni, Priluki, Gadis, Poltava, Lubin, Pereiaſlavl, and Mirgorod; each having its capital town of the ſame name, and diſtrict-towns, with numerous villages for Kozaks and boors.

The regiments * have as many Kozaks as there are barracks in the confines of the government; accordingly there is a great inequality in the number of companies as well as of men. In regard to officers or commanders who furniſh themſelves with horſes, clothes, arms, and accoutrements; their œconomy is the ſame with that of the Kozaks in general. By the appointment of king Stephen, they were all placed under one chief †, but, as ſome of them greatly abuſed their power, ſcarcely any thing of that dignity now remains except the title. The Kozaks hold their meſſuages entirely as freeholds, and follow whatever employments or trades they pleaſe.

The malo-ruſſian military has its own juriſprudence, and its own war-chancery, in which

* Polki. † Hetman.

the

the hetman preſides, who, till the time of Mazeppa, was nearly arbitrary in his decrees; yet one part of the troops is ſtill called the hetman's guard. The inſignia of the hetman are, the truncheon, the national ſtandard, the horſe-tail, kettle-drums, and the national ſignet. For defraying the public expenditures, the Kozaks raiſe money by taxes on corn, tolls at bridges, fairs, &c.

When the Malo-ruſſians ſubmitted to Ruſſia, they conſiſted of 40,000 warriors, who ſoon increaſed to 60,000. At preſent they are incomparably more numerous, but great numbers of them are regiſtered only as Reſerve-Kozaks. In later times a part of the Kozaks, eſpecially ſuch as are properly ukrainian and ſlobodian are put on the footing of huſſars, and changed into regular light-horſe. They retain their meſſuages, are in conſtant ſervice and pay, wear the huſſar uniform and arms, and their officers have rank in the army. All theſe together compoſe a body of about 30,000 men, and conſiſt of ten regiments, the ſervian, the moldavian, the macedonian, &c.

The malo-ruſſian yeomanry in the regiment-towns, &c. are free, have magiſtrates and voievodes of their own chooſing, and purſue all kinds of civil trades. They are under the chancery of the malo-ruſſian general government.

The boors * live in villages adjacent to thoſe of the Kozaks, and belong either to the crown or to the nobility. They are eſtabliſhed according to the laws, and not at pleaſure. They are exempt from military ſervice, but pay the head-money. They exceed the number of the Kozaks and burghers in a three-fold degree.

The houſes of the Kozaks, burghers, and boors, are more in the foreign ſtyle, of partition-work and mud-walls; where wood is ſcarce, almoſt entirely of mortar, with more apartments, always with chimnies, and plaſtered white on the outſide. The furniture is likewiſe more in the foreign taſte, and better finiſhed. Many of the principal people and foreigners, both in their habitations and their manner of living, entirely reſemble the Poles and Germans.

The towns carry on a trade with the products of the country, corn, cattle, flax, wool, tobacco, ſaltpetre, &c. and have all the neceſſary artificers. They trade to St. Peterſburg, Riga, Breſlau, Poland, the Krim, and other places, and carry brandy to the ruſſian towns. As yet they have ſet up no manufactories.

Agriculture and the breeding of cattle are the chief buſineſſes of the Malo-ruſſians. They produce far more corn than they want for their own

* Poſpoliti or Poddamie.

conſumption,

conſumption, which overplus they partly export, and partly diſtil into a prodigious quantity of brandy. About Kief and Poltava they have lately made a good beginning with the culture of the ſilk-worm and the vine. In ſome diſtricts grazing ſucceeds much better than agriculture. The ſeveral ſpecies of cattle reſemble thoſe of Poland. The ſheep are of the common ſort, and bear good wool, but the management of them will ſtill admit of great improvements. They attend more to the breed of neat-cattle than of horſes, becauſe they uſe the former for draught, and becauſe they always grow fat in autumn, and may be ſent in large droves for the ſlaughter-houſes of Breſlau, St. Peterſburg, and other places. Many of the country-people and Kozaks have conſiderable cow-fares, and numerous ſtocks of bees, which they tend in the poliſh manner. Even children are employed in the ſandy diſtricts in gathering the poliſh cochineal *, or the cocons of an inſect found on the roots of the ſeleranthus perennis Linn. of the lichnis viſcoſa †, of the ſtrawberry and the cinq-foil.

The Malo-ruſſians feed like the Ruſſians, only as they have fine gardens, they eat more vegetables, and in general their diet is better. Where there is plenty of beer, mead, and brandy, they

* Tſhervetſh. † Smilka.

ſeldom care about wine. In woodleſs places they warm their rooms and cook their victuals with dried weeds, ſtraw, and cow-dung.

People of the towns dreſs themſelves in the german, ruſſian, and ſome in the poliſh manner. The Kozaks go entirely in the poliſh dreſs, only not with the ſhaven crown. They wear little caps with a flat broad brim; the huſſars are clad in their own uniform; the peaſantry wear the ſame clothes as the boors of Ruſſia and Poland.

The women of condition are getting every day nearer to the french ſtyle of dreſſing.

The ceremonial of their baptiſms and burials is that in uſe with the greek church.

At their marriages, it is uſual for the mother of the bride, from an old traditionary ſuperſtition, to try to frighten the horſes of the gueſts. On the morning after the wedding the tokens of preſerved chaſtity are exhibited; and that day is paſſed more jovially than the former. On ſuch occaſions it is neither unuſual nor diſgraceful for even ladies to take ſtrong liquors far beyond the point of exhilaration; indeed, in plain terms, to be completely drunk.

The Malo-ruſſians have no peculiar maladies. The plague ſometimes appears upon their frontiers; but it neither ſpreads wide nor laſts long. They have cured the venereal diſeaſe from time imme-

immemorial, by a ſolution of a drachm of mercurial ſublimate in three pounds of brandy, of which they take a ſpoonful daily. Even inoculation of the ſmall-pox has been long in practice among them. Without any preparation, they bind a rag dipped in the variolous pus upon ſome part of the child's body, without making an inciſion in the ſkin. The child ſeldom dies of this diſeaſe, and as ſeldom ſuffers any injury.

During the war between the Kozaks and the Poles numerous bodies of fugitive Kozaks fled from the weſtern to the eaſtern ſide of the Dniepr into the ſouthern provinces of the ruſſian empire, where, preſerving their military conſtitution, they ſettled in an uninhabited but fertile region *. This is the origin of what are called the ſlobode Kozaks. The country in which theſe were eſtabliſhed had antiently belonged to the grand-duchy of Kief, and, from the time of its being firſt over-run by the Tartars, had remained an unpeopled deſert; the newcomers who now returned to the deſolated inheritance of their fathers, were well-received by tzar Alexey Michailovitch; their numbers increaſed by the arrival of new ſettlers, and they conſtructed many towns and villages. This re-

* In the preſent government of Kharkof, and partly too in thoſe of Kurſk and Voronetch.

gion at preſent is one of the moſt inhabited of the ruſſian empire.

The ſecond conſiderable colony of the malo-ruſſian Kozaks, the Zaporogians, aroſe much earlier than the ſlobode regiments. In order the better to defend the country of the ukraine Kozaks againſt the inroads of the Tartars, it had been ſettled that a part of the young unmarried men ſhould always abide on the ſouthern borders where the Dniepr falls into the Euxine; by which means this diſtrict ſhortly became a rendezvous of ſtout martial youths, and the ſtay there was conſidered as a ſchool for military exerciſes. The Poliſh government favoured this ſeminary, by which the country obtained the benefit of a border-militia; and the greater degree of freedom in which the young Kozaks here paſſed their time, was ſo agreeable to them, that they were never deſirous of a diſcharge from their unquiet and dangerous poſts. Accuſtomed to a bachelor's life they admitted no women among them; yet their numbers were gradually increaſing by fugitive Kozaks who ſought a ſhelter among them from poliſh oppreſſion. By little and little their habitations extended to the ſhores of the Bogue, and they eſtabliſhed themſelves in all the adjacent parts. About the commencement of the ſeventeenth century

century they came to a total ſeparation from the parental ſtock, the malo-ruſſian Kozaks, under the hetman whereof they had hitherto lived, and erected a military ſtate of their own, whoſe chief was to be an elective arbitrary koſchevoi-ataman. Their chief-ſeat, which they called *ſetſcha*, conſiſted of a fortified camp, and though they often removed it from one place to another, yet they conſtantly remained about the cataracts, *porogi*, of the Dniepr, from which they received their diſtinctive appellation *: Zaporogi, "at the cataracts."

The conſtitution of this little military nation was one of the moſt curious in the world. War was the ultimate aim of their ſocial connection, their habitual trade, and their darling employment. Agriculture and the breeding of cattle they entirely neglected, and followed the fiſhery, and the chace, no otherwiſe than as matters of paſtime. Celibacy was enjoined as a fundamental law of their ſtate; but for gratifying the

* *Koſch* in the tartarian ſignifies a camp. Ataman is of like import with hetman. The term *ſetſcha* comes from the ruſs verb to cut off, to lop away (1); the camp was fortified, and conſequently cut off from the circumjacent region or diſtrict. *Za* in ruſs ſignifies behind, beyond, and *porog* a cataract or water-fall.

(1) Otſſetſch.

inſtincts

inſtincts of nature they made a practice of bringing off women from their neighbours, but the raviſhers were obliged to keep the victims of their luſt at a diſtance from the ſetſcha. In order to keep up their numbers, they not only ſtole children wherever they could catch them, but criminals and vagabonds from all the nations around were welcomed and adopted by them. There are but few european languages that were not ſpoken among them. — Their conſtitution was purely democratic; every Kozak enjoyed equal rights. Their ataman was elected annually; and, on the expiration of his office, fell again to the rank of the common Kozaks. Every citizen of the republic had equal pretenſions to this ſovereign dignity. — No written laws were known to them, but they had uſages which held the place of law, and by which deciſions were made with extraordinary ſtrictneſs and impartiality. A Kozak who killed his fellow-citizen was buried alive with the body. A thief was obliged to ſtand three days on the pillory, and puniſhed with laſhes till frequently he died under the ſcourge. — The generality of them adhered to the greek church; yet no notice was taken of diverſity of opinion in matters of faith. Their moral character was conformable to their way of life and form of government:

they had all the virtues and vices of a free people ſubſiſting by war and rapine. They were courageous and ſavage; hoſpitable and greedy of prey; active and temperate on their expeditions, and lazy and gluttonous at home. — The number of effective men among them, amounted at times to 40,000 *.

Theſe Kozaks often changed their ſovereignty, if we may ſo call the relation in which this indomptable people ſtood one while with Poland, then with the Tartars and the Porte, and laſtly with Ruſſia. Peter the great deſtroyed their ſetſcha, on their taking part in the rebellion of the ukrainian hetman Mazeppa; but they aſſembled again afterwards under the protection of the khan of the Krimea, and were re-admitted in 1737 as ruſſian vaſſals. A chancery was erected for the purpoſe of overſeeing them, which however had but little or no influence on their internal government. The only obligation they were under to the empire was to appear in the field when commanded, at which times they were paid and provided as was cuſtomary with

* The ruſſian chancery was ſeldom exactly informed of the real number of the Kozaks, as they conſidered their force as a political ſecret. In the year 1764, the number of effective people was thought to amount to 27,117; but probably they were much ſtronger.

the

the Kozaks. In the turkiſh war which terminated in 1774, they not only proved faithleſs on ſeveral occaſions, but alſo betrayed their deſign of rendering themſelves independent. When they re-captured the region of the Dniepr, which at that time was called New Servia, but afterwards belonged to the New-ruſſian government, and was peopled with coloniſts, they declared that country to be their property, practiſed hoſtilities againſt the ſettlers, and partly by artifice and partly by violence reduced about 50,000 Malo-ruſſians to their obedience. This rebellion, their life of celibacy and rapine, the total neglect of agriculture in ſo fertile a country, and the conſtant reſiſtance they made to every attempt at bringing them to a better conduct, at length determined the empreſs, in the year 1775, entirely to annihilate the exiſtence of this little ſpartan ſtate. A body of ruſſian troops ſurrounded and diſarmed them. A manifeſto was iſſued, by which it was left to their choice, whether, by adopting a decent and moral regimen, they would become uſeful ſubjects, or take themſelves out of the empire. A part of them remained, and took to various trades; others in numerous bands withdrew to the Turks and Tartars, or led a roving life about the ruſſian frontiers. The country which they had poſſeſſed was added to the then New-ruſſian government,

vernment, and belongs at preſent to that of Ekatarinoſlaf.

Thus far their hiſtory is known and even related by foreign writers. Not ſo notorious, however, is the remarkable fact, that the zaporogian Kozaks ſtill ſubſiſt, only under another name, and have recently received a new conſtitution in a country allotted to them. By an ukaſe of the 30th of June 1792, Catharine II. aſſigned to the Zaporogians, who rendered themſelves ſerviceable during the laſt turkiſh war, the iſland of Taman (belonging to the province of Taurida) with the entire region between the river Kuban and the ſea of Azof as far as the rivers Yeya and Laba (a tract of 1017 ſq. geogr. miles) for their place of ſettlement. They obtained at the ſame time, under the name of Kozaks of the Euxine, a well-regulated kozak-conſtitution, and the right of electing their own atamans; but are immediately dependent on the governor of the province of Taurida, and are placed under the department of the college of war. Their numbers, of both ſexes, amount now to above 20,000, among whom is a diſciplined corps well-equiped of 15,000 men.

We ſee then that though their little democracy was perfectly in the manner of the Kozaks, yet

yet it was far more inflexible and ſevere, and in its political œconomy entirely ſpartan. Like them they were divided into companies, and had officers of the ſame diſtinctions. To live in military celibacy was their primary law. But, as, in this manner, they muſt ſoon die out and be extinct; they fell on the expedient of adopting all the fugitives from every nation, without paying the leaſt regard either to language or religion, or adverting at all to their manners or any former criminality of conduct. Accordingly, they were a vile rude mixture of Malo-ruſſians, Poles, Tartars, and every other alien race, which not only did not decline, but went on increaſing. All the officers were in the pay of the crown. The ſource of maintenance to the common people, in the method of the Kozaks, ought to have been huſbandry; but they make depredations and plunder, on the territory of the Tartars, Turks, and Poles, their principal buſineſs, not only in time of war, but at all times.

Their ſetſcha had a wooden fortification, and a particular fortreſs, containing the artillery, arms, ammunition, and warlike ſtores. The ſetſcha had ſome reſemblance with a kozak polk, or regiment, divided into 38 quarters * anſwering to

* Kures.

companies.

companies. In the ſetſcha were but few timber houſes, as the generality of theſe Kozaks dwelt in huts of earth with thatch-coverings. Each kure had its officers, and an attaman *, but all of them under the command of the koſhevoi attaman, who, for the time his office laſted, enjoyed great authority, as alſo conſiderable revenues from tolls on carriage of goods, impoſts on merchandize, brandy, &c. but, when out of office, he returned to the common level, and was paid no greater reſpect than the reſt, as they regarded all that were out of the ſervice as brethren. This officer was elected annually, and might till then have been only a common Kozak, ſo he had but diſtinguiſhed himſelf by prudence and courage; and, whatever he had been before his election, to that he became again on the expiration of his office. To be a Kozak, was, in their opinion, a great honour; and therefore they uſed to adopt as Kozaks, foreigners even of the higheſt ranks, who happened to be travelling through their country, giving them a diploma to produce as occaſion might require, to certify to the world that they had been found worthy of that ſuperior diſtinction. As all among them enjoyed equal rights and liberties, every diſſatisfied perſon,

* Kurevoi attaman.

without

without any formal diſmiſſion, was free to go wherever he pleaſed: though the greater part of the Kozaks dwelt in the ſetſcha, yet many of them lived in a ſuburb adjoining to it, and not a few on their little cow-yards *, and the petty villages of their territory.

In the ſetſcha was a market-place, wherein there conſtantly ſtood a pair of kettle-drums, which were beat by the maſter-drummer †, whenever the people were to be called to council. At this market were ſold proviſions, materials for clothes, with all kinds of neceſſaries, brought thither by foreign merchants, who took up their quarters in the ſuburbs. The chancery was ſo negligently conducted, that it ſeldom knew the true number of the people. This was very unequal, but was generally ſuppoſed to exceed 40,000 men. In the year 1764, they had 27,117 Kozaks in actual ſervice.

Public aſſemblies ‡ were held in the market-place. The koſhevoi attaman appeared with the enſigns of his office, the baton of command §, the banner, and the ſecretary of ſtate with an ink-pot. Round the commander ſtood the people. The koſhevoi ſtyled the people his young briſk brethren; and the people in return ſaluted their officers in terms of reſpect. How-

* Chutori. † Dobyſh. ‡ Rada. § Politza.

ever,

ever, after all these mutual compliments, they frequently proceeded to injurious epithets, and thence to blows; for many of them, who wanted to carry some particular motion, or had an interest in preventing the success of another, came to the assembly drunk. Whoever was the subject of debate, was obliged to keep at a distance, as he otherwise ran the risk of being killed on the spot. In the rada they consulted on pretexts for going on parties of pillage and rapine, and the best means of conducting them. As the cavalry stood the brunt of all, they retained the booty. At the election of the koschevoi and the starshines, almost the whole rada used to be drunk. The koschevoi likewise, during his office was obliged to be very bountiful in brandy, as a means of procuring obedience. The Malorussians followed the laws of Poland; the Zaporogians had nothing written, but judged according to antient usage, and decided by the plurality of voices. I shall just throw together a few particulars concerning them, in addition to those already given.

Each Kozak procured himself a horse, arms, clothes, ammunition, and provision, for ravaging parties. While in service they were provided and arrayed by the crown like other Kozaks.

It was their general practice to make attacks, in which there was little hazard and much to be got.

Though the Kozaks of the ſetſch lived by property, according to the primitive import of the term, as vagabonds, on ſpoil, &c. yet many of them in little villages without the ſetſcha purſued ſomewhat of agriculture and graziery in the maloruſſian method. In times of peace they all received a little pay from the public cheſt. The fiſhery on the Dniepr was likewiſe a great help to them; which they divided, according to the number of the kures, into 38 portions. Many in the ſuburbs addicted themſelves to traffic and the vulgar trades, in proportion as bounds were ſet to their ravages and depredations.

In their clothes they reſembled the Poles, or rather the poliſh Ulans; every one wearing ſuch materials and colour as he choſe. Their dreſs was handſome and warlike.

In the ſetſcha they lived, according to our notions, very uncomfortably and miſerably. Each kure was a ſeparate meſs, and a couple of Kozaks were cooks. Their every-day's food conſiſted in porridge of meal or grits, and quas or fiſh-ſoup with meal, which they ate out of long troughs with ſpoons. They very rarely taſted fleſh, and ſtill ſeldomer bread; but they guzzled

guzzled brandy as long as their money held out; when that was gone, they were obliged to be ſober for ſeveral weeks. Marriage formed no part of their political economy; no woman was even allowed to come into the ſetſcha. Such as had the good luck to carry off women from the Tartars and Poles, or to get looſe females from Little-Ruſſia, cohabited with them as married people, or even without the forms of eſpouſals in their home-ſtalls. The ſons were raw unpoliſhed Kozaks like the fathers. Neither marriage nor the attendance on domeſtic affairs were allowed to detain them from fulfilling the decrees of the ſetſcha.

Whoever was a Kozak, was bound to profeſs the faith of the orthodox Greeks. When they had been ſucceſsful in robbery, they firſt ſhewed their gratitude to heaven by making rich preſents to the church and its miniſters; and then bought themſelves handſome ſabres and clothes, and entertained in the drink-houſes all that came; by which liberality they were ſoon reduced to poverty again. When general Balmain ſurrounded and deſtroyed their ſetſcha in 1774, he found this barbarous and unruly gang of banditti in poſſeſſion of 46 pieces of cannon, and a large quantity of ſmall arms and ammunition. The

generality of these reduced Kozaks are become peaceable and industrious husbandmen.

I shall close this account of these Kozaks with some general remarks by Mr. Pleshtscheyief. The ground occupied by the Kozaks, says he, is exceedingly rich and fruitful, very proper for agriculture, for the cultivation of vines, for gardening, and for pasture: but the Kozaks, whose supineness is unpardonable, being totally given up to laziness, make not the least advantage of their fine situation, and neglect every benefit which would enable them to be happy themselves as well as useful to their neighbours. They carry on a tolerable commerce with the Greeks and the inhabitants of the Kuban, which consists in fish, horses, horned cattle, and other products. They make some wine, but in so small a quantity that the whole of it is consumed at home. About the Don, as well as in almost every part of Russia, from time to time are found gypsies, a race well known every where by their frauds and larcenies. They have no fixed residence, but wander continually from one place to another, and exercise the trades of blacksmiths, farriers, and horse-dealers, which last profession they generally carry on by exchanging instead of selling their horses. In order to collect the poll-

tax

tax with greater certainty, the majority of them are put under the inſpection of different maſters, of whom they are obliged to obtain paſſports before they can go upon their perambulations. To the number of the Kozaks may be added the inhabitants newly planted in the neighbourhood of the Euxine. Theſe laſt are under the direction of the great hetman of the Kozaks of Ekatarinoſlaf and that ſea, whoſe numbers are not yet preciſely aſcertained.

The ſecond main branch of the Kozaks are the Donſkoi. They have this appellation from the region of the river Don, which they have conſtantly inhabited, and moſt probably derive their deſcent from novgorodian Ruſſians. The firſt ſettlements of them on the Don cannot well have been earlier than after the Tartars were forced out of thoſe parts. The ſame homeſtead and a ſimilar mode of life probably occaſioned the tartarian name of Kozaks to be given to the riſing colony, which was afterwards communicated to the confederate Malo-ruſſians, who lived under a like military conſtitution. It is not improbable that the Ruſſians, on their firſt coming, found ſtill conſiderable remains of Tartars in theſe parts, with whom they united and induced them to adopt the greek religion and the ruſſian language. This ſuppoſition at leaſt accounts for

the rapid increaſe of the republic and the ruſſo-tartarian mixture, which is ſtill perceived, as well in the features as in the language of the donſkoi Kozaks.

This colony, ſoon after its origin became a conſiderable ſtate. The happy effects of their profitable warfare tempted a multitude of bold and enterpriſing youths to come over to them from all the provinces of the empire; and the vaſſalage of the boors, introduced about this time into Ruſſia, contributed greatly to multiply their numbers by runaways from this depreſſed condition. A great many eſcaped back to their former homeſtead, and even the priſoners of war obtained denizenſhip by the policy of the Kozaks, for the ſake of increaſing the number of their ſoldiery.

After the unfortunate campaign of the Turks againſt Aſtrakhan in 1570, they felt themſelves ſufficiently bold and powerful to make Tſcherkaſk their capital, 60 verſts from the fort of Azof belonging to the Turks. — They were now in reality a bulwark to the ruſſian empire; the monarch of it therefore acted by theſe Kozaks, as the kings of Poland about the ſame time did by the Malo-ruſſians: ſhe favoured their growth, aſſigned them countries free of impoſts, on the borders, and endeavoured to keep them in a

fort

ſort of dependence which might be uſeful to the government, eſpecially in times of war. In the year 1579, we for the firſt time meet with donſkoi Kozaks among the ruſſian troops; a body of them conſiſting of 3000 men were in the expedition made by tzar Ivan Vaſſillievitch againſt Livonia, by whom they were alſo paid. Since that time they have frequently been of great ſervice to the ruſſian empire by their bravery; though, from their love of independence and from their propenſity to depredation, they have ſuffered themſelves to be incited to rebellion *.

At preſent the donſkoi Kozaks inhabit the plains about the Don, between the governments of Saratof, Caucaſus, Voronetſh, and Ekatarinoſlaf, as far as the ſea of Azof. Their territory, which even now amounts to upwards of 3600 ſquare miles, was formerly far more extenſive; but ſince the rebellion of 1708, a part of it has been added to the adjacent provinces. As the donſkoi Kozaks have preſerved their kozak conſtitution entire, they live under a military regimen totally different from the other governments. Their number is eſtimated at 200,000, of whom

* The moſt important rebellions of this nation, are, that of the year 1670, of which Stenka Raſin was at the head, and that of 1708, under the conduct of Bulavin.

a corps of light-cavalry of 25,000 is always ready for marching.

Internal revolutions, and a diſpoſition to broils, have given birth to many emigrations of the donſkoi Kozaks, whereby ſeveral new branches of Kozaks have ariſen, of which only the moſt ſignal are deſerving of being farther particulariſed. — The earlieſt emigrations happened to the Volga, where the Kozaks uſed only to tarry in ſummer, and on the approach of winter to return to their dwellings about the Don. In proceſs of time, a part of them completely ſettled about the firſt mentioned river, whereby ſeveral towns on the Volga, as Saratof, Dmitrefſk, Tzaritzin, Tſchernoi Yar, and others, obtained inhabitants, who afterwards for the moſt part went over to the civil conſtitution. In the year 1734, the *volgaic* Kozaks were declared independent on thoſe of the Don; when they obtained equal privileges with the latter, and had their own ataman. At preſent the kozak regimen is aboliſhed among the greater part of them; no more than two colonies are upon the true kozak eſtabliſhment and perform military ſervice. Theſe are the DUBOFSKOI and the ASTRAKHANSKOI. The former have their chief ſeat in the little town of Dubofca, on the right bank of the Volga. The country aſſigned them lies between Dmitrefſk and Tzaritzin,

Tzaritzin, and extends over a ſpace of 100 verſts in length and 60 in breadth. They amount to about 3000 heads. In the year 1776, they were obliged to deliver a part of their men, who were formed into a proper kozak-regiment, and had its quarters between Moſdok and Azof. — The aſtrakhan Kozaks dwell partly in the city of Aſtrakhan, and partly in the villages around; in numbers they are about equal to the former.

The donſkoi Kozaks are moſtly well-ſet, handſome men. The generality of them have a countenance completely ruſſian, but in many is ſeen a mixture of the tartarian; probably from their female anceſtors of that race. Their moral character is entirely ruſſian; but their education and courſe of life render them more bold and reſolute than the ruſſian vulgar. Totally negligent of all ſcience and letters, by which a generous occupation is afforded to the mind in the calm retreats of ſtudy, they have at all times had people, who have rendered themſelves famous as heroes and conquerors, and ſometimes as rebels or tyrants. The patriarchs of the uralian Kozaks; Yermak, the conqueror of Siberia, Stenko Raſin, Bulovin, Yemelka Pugatſhef, were donſkoi Kozaks.

The conſtitution of the Kozaks of the Don is that before mentioned as common to them all;

yet ſince the late wars with the Turks, their polki, or regiments, are put on a more regular footing, are uniformly clothed and accoutred, and their officers have rank in the army. In 1778, four of their atamans were made colonels, and more than 20 of them majors. From the regiſters of the year 1764, they raiſed, clothed, armed, and mounted 16,000 men at their own coſts; at preſent, in proportion to their numbers, they can at any time furniſh 50,000 cavalry completely equipped. In regard to the crown, beſides the many privileges that have been granted them, they are entirely exempt from the payment of taxes; for the levies their internal conſtitution requires, they impoſe ſmall contributions on themſelves.

As far as Tcherkaſk, they all live in ſtanitzas or badly fortified villages, of which they have ſomewhat more than a hundred. Every ſtanitza contains a company unequally numerous; has its officers, the atamans, its ſotnik, yeſſaul, and writer, its court-houſe, a ſtandard, and a few pieces of cannon. Some ſtanitzas have two churches. — When a meeting is to be held at the court-room, the yeſſaul cries aloud in the ſtreets: Ye ſons of atamans! come to council! — Without the ſtanitza is an incloſed place *

* Taboun.

for

for muſtering the horſes. Tcherkaſk, their only town, they boaſtingly call, our donſkoi-kozak town. It is ſpacious, populous, and divided into eleven ſtanitzas or quarters. Here is the chancery of the whole tribe, in which the commander, or chief ataman, preſides, and the officers of the regiments or polki are the council. From the low ſituation of the town on the right ſhore of the Don, one part of it is much expoſed to inundations. As the donſkoi are more employed in ſervice than the other corps of Kozaks, they are conſequently better ſoldiers. War is their element, becauſe they then can live according to their own inclinations, and benefit themſelves by the ſpoils of their enemies.

Their houſes in the ſtanitzas are like the ruſſian; but having moſtly chimnies, they are therefore more cleanly. Since the pruſſian war, they have been obſerved to have better furniture, and to live more comfortably; many of their rooms are handſomely fitted up with paper-hangings, and the holy figures are better painted. Tcherkaſk contains ſome brick-houſes. They are a hoſpitable people; great lovers of ſtrong liquors, which they enjoy in frequent potations.

When at home, their principal ſupport ariſes from the breeding of cattle, agriculture, and the fiſhery.

fiſhery. The chace is but of little conſequence in their open ſteppes. Many of them have farms *, and on them from 50 to 200 horſes, horned cattle to the ſame amount, and a ſtill greater number of ſheep: the grazing buſineſs, from their mild and ſhort winters, ſucceeds very well; and, on the banks of their rivers, they have plentiful crops of hay, rich lands for all kinds of corn, and thick foreſts. In general, from their propenſity to war, and a diſpoſition to idleneſs, they are very negligent of huſbandry; and then, from the want of towns in which they might turn their ſuperfluity of money, they have no encouragement to purſue it but what ariſes from neceſſity; ſo that they are moſtly poor. The ſame negligence is apparent in their orchards and gardens, which, with but moderate induſtry, might be made very productive. With arts, mechanics, and the various branches of ſtudy, they never meddle at all. At Tcherkaſk, it is true, the ordinary mechanical trades are carried on; but then it is by foreign workmen; and, as to the common Kozaks, they make themſelves what they want for their own uſes, and are contented with it, as it is, without aiming at making it better. What fiſh, caviar, izinglaſs, and hides remain over

* Chutori.

from

from their own conſumption, they barter with ruſſian, tartarian, turkiſh, and perſian merchants for iron, articles of clothes, and ſmall wares.

The women, from the frequently long abſences of their huſbands, are more accuſtomed to work in the field than the Ruſſians; but they alſo reſemble the men more in their manner of life and in regard to drinking; it is ſaid of them too, that they eaſily ſupply themſelves with other comforts while their huſbands are away.

Their manners and cuſtoms differ very little from thoſe of the Ruſſians. In their eſpouſals they obſerve no tedious ceremonies. The bride is fetched by the bridegroom and his friends on horſeback; and the horſe of the bridegroom is hung about with a great number of little jingling bells.

Their martial exerciſes conſiſt in riding, tilting, and hacking with the ſabre, and are a ſort of ſolemn games. On theſe occaſions they appear well mounted, in their beſt clothes, and exert all their dexterity. When the ammunitions arrive that are ſent annually by the crown, they and the eſcort are met by all the ſtanitzas in parade, and received at the diſtrict of Tcherkaſk by the polk of the place, with its colours flying, and brought to the arſenal in grand proceſſion.

A ſecond

A ſecond colony of the donſkoi Kozaks are the GREBENSKOI who ſeparated from their parent-ſtock about the ſame time with the VOLGAIC, and ſettled about the river Terek, whence they are alſo called TEREKSKOI Kozaks. In a campaign of the tzar Ivan I. againſt the caucaſian Tartars, a body of them, as the van of the army, penetrated into a part of this great chain of mountains, which on account of its prominent rocks was compared to a *comb* *; and on this occaſion it was that they received their appellation, which they generally bear to this day. Their preſent homeſtead is on the Terek, where their regiment, conſiſting of 1200 men, does duty in the frontier lines againſt the highland Tartars of Caucaſus. Their deſcription is nearly that of the laſt-mentioned race; on whom they were even dependent in ſome reſpects till 1708, but at preſent not at all.

They dwell in five fortified ſtanitzas, making ſo many companies. Beſides their own commanders and war-officers †, they are under the orders of the commandants in the Kiſliar and Moſdok. Being principally uſed againſt the Tartars of Mount Caucaſus, they are almoſt always under arms, and therefore in conſtant pay. Being

* In ruſs, *greben*.

† Voiſkovoi ataman.

thus

thus inured to ſervice, courageous, and well-acquainted with the mountains and the tartarian manner of fighting, they are of excellent ſervice againſt theſe untractable and piratical neighbours; but their number not being ſufficient, in the year 1776, ſix ſtanitzas, or fortified villages, between Moſdok and Azof, were added to them, and ſupplied with Kozaks from the Volga. Theſe form one diſtinct polk, or corps, under the denomination of the troop of Aſtrakhan-Kozaks. — Near the grebenſkoi Kozaks dwell the SEMEINSKOI, who are of the ſame origin with them, and therefore need no particular account.

The hoſt of the donſkoi Kozaks having conſiderably encreaſed in numbers, the horde of the Volga by inſenſible degrees ſprung out of it; who at firſt only paſſed their ſummers on the Volga, but the winter in their ſtanitzas on the Don, and at laſt remained ſtationary on the Volga, whereby all the towns bordering on that river, from Samara, as Saratof, Dmitreffk, Tzaritzin, and Tchernoyar, became inhabited; and their inhabitants, in proceſs of time, from the condition of kozaks, attained to the ſtate of burghers; and at preſent are under the uſual municipal magiſtracy, as merchants, burghers, or boors. A conſiderable number of them, however,

however, ſtill adhered to their primitive conſtitution as kozaks, independent of thoſe on the Don.

The preſent Volga-Kozaks conſiſt of two polks, the duboſſkoi and the aſtrakhanſkoi, the former of which is elder than the latter, and is vulgarly called the Volga-militia *.

The duboſſkoi polk has its chief reſidence and chancery in the ſlightly fortified town Dubofka, on the ſhore of the Volga, near the mouth of the river Dubofka, 53 verſts above Tzaritzin; a part of them, however, dwell in great villages, on the ſhore of the Volga, above and below Dubofka. This polk has its war-commander, and other officers, artillery, arms, ammunition, all furniſhing their own horſes, their own cloaths at pleaſure, &c. like thoſe of the Don, and is regiſtered at ſomewhat above 1000 men fit for ſervice, though they might raiſe to the number of 3000. This corps is dependent on the commandant of Tzaritzin; and, as the greater part of them are in continual ſervice, ſo they are all conſtantly in pay. Their lands are but little fit for agriculture, thoſe on the banks of the Volga conſiſting of wet meads liable to inundations, and farther from the river of arid

* Volſkoe voiſko.

hilly

hilly ſteppes. They are well adapted to the breed of cattle, which accordingly they follow as far as their military ſervice will allow, and their wives can manage it. Many of them have farms with a good number of cattle; but the greater part are far from being rich. In 1776, a large company of them was draughted off, and ſtationed in ſix ſtanitzas between Moſdok and Azof, where they form a polk apart.

The aſtrakhan Kozaks dwell partly in Aſtrakhan, and partly in villages between Aſtrakhan and Tzaritzin, on the right ſhore of the Volga. Until the year 1750 they had only 300 men in ſervice; at preſent they are equal in numbers with the dubofſkoi: but they have far leſs people of reſerve, as almoſt all the men are in arms. Their whole eſtabliſhment reſembles the dubofſkoi, conſequently like a donſkoi polk. In like manner they are in conſtant pay, as alſo in perpetual ſervice, and dependent on the commandant at Aſtrakhan. One main part of their ſervice is to furniſh the relays at the ſeveral ſtations, and the neceſſary eſcorts for travellers and baggage; the former according to the poſt regulation for pay; the latter as ſervice on the highways from Aſtrakhan to Tzaritzin and part of the road to Kiſliar; by which they ſometimes gain and ſometimes loſe.

Their villages * are newly built, in a regular method. For want of timber, the houſes are made of ſlight frame-work, with clay-walls. The villages are ſurrounded with earth-ramparts, and furniſhed with a few pieces of cannon to protect them againſt the Kalmuks, Kubanians, and Kirghiſians. The Kozaks placed at ſtations between very diſtant ſtanitzas, and are relieved at ſtated periods, live in pits dug in the earth, built over with buſh-huts and wicker work.

As the Kalmuks wander about the ſteppe as far as the Volga, and in the vicinity of the ſtanitzas, with their herds; and the ſteppe itſelf being far more ſaline than higher up the Volga, theſe people, even though they had time for it, have but little opportunity for agriculture, and even the management of cattle is attended with numerous and great impediments; they therefore keep only horſes for ſervice, with a few cows and ſheep for houſehold purpoſes: they profit more from the fiſhery, which they are at full liberty to make the moſt of. To conclude, they live as ſoldiers and carriers, who, in dreſs and manners, differ not at all from the Don-Kozaks, their patriarchal ſtock.

More lately than the volgaic, the ORENBURG-Kozaks ſeparated from their common ſtem. At

* Stanitzas.

their

their firſt riſe they dwelt collectively about the river Samara; but, after the conſtruction of the Orenburg-line in 1730 to 1740, the major part of them were tranſported thither. At preſent they have their homeſtead along the Samara; along the Ui and the Ural, from Verkuralſk to Ilezk, alſo in the petty forts erected againſt the Kirghiſes and the Baſhkirs. In all theſe forts, Orenburg excepted, they compoſe the majority of the inhabitants, and can eaſily bring 20,000 men into the field; though only from 8000 to 10,000 are inrolled for military ſervice.

Their army eſtabliſhment only differs from that introduced among the Don Kozaks in this, that they compoſe ſo many troops as they poſſeſs forts, not polk-wiſe belonging to one body, but are all under the war-ataman at Orenburg. Their employments in garriſon, are to form little encampments between the diſtant forts, to patrol the frontiers, to provide for the convoys or eſcorts and relays, to go on expeditions in the kirghiſian ſteppe, whenever their preſence is neceſſary for repelling their attacks, or for enforcing reſtitution for the robberies and depredations committed by the hordes; in all which the Baſhkirs are very helpful to the Kozaks. Their remote ſituation does not allow of their being ſent to diſtant ſcenes of war; therefore

their diviſion into polks or regiments is not neceſſary.

The reſt of the military eſtabliſhment of the orenburg-Kozaks in regard to their commanders, arms, pay, &c. is perfectly ſimilar to that of the Kozaks of the Volga and the Don. Their dwellings and dreſs are the ſame. The females clothe themſelves like the country-women of the provinces where they live.

Their means of ſupport, beſides their pay, are different in different diſtricts. Thoſe on the orenburg-line, for want of good arable land, moſtly follow the breeding of cattle and many carry on trade. In the Baſhkirey, the provinces of Ufa and Iſet, they cultivate the ground with induſtry and profit, as they can get a good price for the ſuperfluity of their produce on the lines. Thoſe in proper Baſhkirey have an opportunity for hunting, which they purſue to great advantage. On account of the fertility of their diſtricts, the opportunities they have of earning ſomewhat, and as their ſervice does not remove them far nor for any long time from their habitations, they are in general wealthier and live better than the Kozaks of the Don.

One of the moſt numerous and powerful branches of the donſkoi ſtem is formed by the URALSKOI, formerly called the YAÏKSKOI Kozaks.

According

According to their traditions they firſt aroſe about the beginning of the fifteenth century by an inconſiderable number who drew towards the Caſpian as free-booters, and afterwards eſtabliſhed themſelves at the mouth of the river Ural, formerly called the Yaïk. Augmented by tartarian ſtragglers and priſoners of war, the colony ſoon ſpread farther up the ſhores of this river; and, at the time of their voluntary ſubmiſſion to tzar Michaila Feodorovitch, they were already a conſiderable nation, which has ſince much increaſed by emigrations from the Don. At the commencement of the laſt century they obtained from the ruſſian government a regular conſtitution, with permiſſion to ſettle in their preſent poſſeſſions. They were placed on the footing of the Kozaks of the Don, obtained the free and exceedingly-productive fiſhery of the Ural, the licence to fetch their ſalt, duty-free, from the adjacent ſaline-lakes, the liberty to diſtil brandy, together with ſeveral other privileges. Preſuming upon their opulence, in the year 1772 they roſe up againſt a reform, propoſed by the government, of the irregular troops; they were, however, ſoon reduced to obedience. The year following a part of them joined the crew of the famous rebel Yemelyan Pugatſhef. On the reſtoration of tranquillity

the government reſtored to them their poſſeſſions and privileges; but in order to efface the memorial of this rebellion, the name of theſe Kozaks, that of their capital, and of the river where they dwelt were aboliſhed, and changed for thoſe they bear at preſent.

Since that time their political conſtitution has got a ſomewhat different form, to prevent the like misfortunes in future. Their number is computed to be about 30,000 men fit to bear arms, and they keep up a corps properly equipped of 12,000 men, among whom, however, are many Tartars and baptized Kalmuks. Their proper homeſtead is along the right ſhore of the Ural, from the mouth of the Ilek to the Caſpian; where, beſides their grand capital Uralſk, they poſſeſs the important town of Gurief on the Caſpian, and perform ſervice in the line of forts on the Ural againſt the Kirghiſes. On the left or kirghiſian ſide of the Ural they have only the ſmall fort Iletzk on the Ilek, which is inhabited by an independent colony detached from the main body. Their territory, which extends in length 80 geographical miles, yet forms no particular diviſion in the political geography of the empire, (like the homeſteads of the Kozaks of the Don and the Euxine,) but belongs to the government of Caucaſus.

Their

Their conſtitution, in the main, reſembles that of the other Kozaks. Their officers ſerve without any farther pay than what they all receive from the crown, and which amounts yearly, for the whole hoſt, to 5000 rubles; but they have ſeveral privileges in the fiſhery annexed to their rank. The people generally make choice of perſons of good condition, though ſometimes of quite common Kozaks, who ſtand in ſome degree of credit with the reſt. The common men, when they remain at home, receive ammunition every year from the crown, and when they march, the ordinary pay. They carry the arms generally uſed by the Kozaks; but their weapons, horſes, and riding-gear are particularly good.

Before the commotions in 1774, when any thing was to be publiſhed or performed, the people were aſſembled round the town-houſe, whence the commanders came forth with their inſignia; and, the yeſſaul having previouſly commanded ſilence, opened their propoſals. To which the people, with great vociferation, replied: We are content! or, We are not content with it! or both at once. At preſent no ſteps can be taken and nothing reſolved on without the approbation of the commandants; and conſequently no more conſultations are held.

The chief town Uralſk ſtands on the high right-hand ſhore of the river Ural, in 51 degrees 10 min. north lat. comprehending, within an incloſure of a ſlight earth-wall, about 3000 houſes built of the white poplar and other kinds of wood. In 1771 there were 4000 Kozaks inrolled for ſervice; but all the inhabitants together amounted to about 15,000, and the leſſer towns collectively might make up nearly the ſame number. Thoſe that ſerve are diſtributed into companies of a hundred to each.

As to their livelihood, they are a fiſher-folk, but certainly one of the wealthieſt and moſt warlike of any in the world. The breeding and management of cattle has, in their mild climate, and their dry ſteppes, every poſſible advantage. Accordingly they keep great numbers of cattle; and many a common Kozak has on his farm *, which lie diſperſed along the ſtreams and rivers to the diſtance of 100 verſts from Uralſk, a ſtock of from 200 to 300 horſes, not fewer horned cattle, and a greater number of ſheep. Their horſes and kine are of the ruſſian ſpecies; but the ſheep moſtly a mixture of the broad-tailed kirghiſian, the ſhort-tailed ruſſian, and the common european, which run all toge-

* Chutori.

ther,

ther, and thereby degenerate to the ordinary european ſpecies. One difficulty attending the management of cattle here, is, that, on account of the depredations of the Kirghiſtzi, and the thieveries of the Kalmuks, they muſt be guarded by ſhepherds armed and on horſeback. For agriculture they have but little opportunity; but fruit ſucceeds ſo well in theſe parts, that the orchards on the banks of the rivers look like little foreſts. Water-melons, or arbouſes, if they be watered at proper times, thrive ſurpriſingly in the dry ſteppes, and eſpecially under the culture of the Kieſilbaſhes. They fetch their corn acroſs the ſteppes, a diſtance of from 500 to 800 verſts from Samara, Syſran, &c. on the Volga, and therefore eat dear bread. Of trade, profeſſions, and the ſeveral kinds of mechanical employments, they are ſo little fond, that pedlars and workmen, paſſing to and fro on their journies through this country, even ſhoemakers and taylors, are ſure at all times to find a flouriſhing buſineſs with them. Some Kozaks have bee-ſtages in the woods by the ſide of the rivers, ſeveral to the amount of 50 hives. The chace yields antelopes * in abundance, and wolves, foxes, ſwine, &c. more ſparingly. Hunt-

* Saiga.

ing,

ing, with the Kozaks, is more a paſtime than a buſineſs.

The river Ural is rich to an extraordinary degree in thoſe fiſh which aſcend it from the Caſpian; eſpecially the various kinds of ſturgeon. The Kozaks make three fiſhing-ſeaſons in the year. In January they fiſh with hooks *. This is principally confined to the belluga †, which in ſome parts of the river lie in heaps as if piled on one another, and gulp the hook the moment it preſents itſelf before them, by which they are drawn without any farther trouble on the ice; and, together with ſterlet, the common ſturgeon is taken in great quantities. In the ſpring ſeaſon they fiſh with nets, in which they principally catch ſevruga, a particular ſmall ſort of ſturgeon ‡, and in autumn alſo with nets, when all ſorts of fiſh are taken. Every fiſhing ſeaſon is opened by the firing of cannons; on which the Kozaks aſſemble, hear the fiſhing-laws read, and then run overjoyed to the places where they intend to fiſh. Only ſuch Kozaks as actually ſerve are allowed to fiſh, and theſe cannot employ any aſſiſtant. The officers may ſend two, three, or four men, according to their rank. Even to the fiſhery the Kozaks go armed, on account of the

* Bagri. † Acipenſer huſo Linn.

‡ Acipenſer ſtellatus Pall.

frequent

frequent attacks of the Kirghiſians. At the fiſhing ſeaſons of autumn and winter, dealers come from almoſt all parts of Ruſſia, and buy fiſh, caviar, and iſinglaſs, for ſpecie. In winter they tranſport the fiſh hard-frozen; in autumn and ſpring they are ſalted, and as it were buried in lake-ſalt. The caviar is prepared immediately after the fiſh are brought aſhore, by ſeparating the filmy ſubſtances from it. The leſs ſalt the better the caviar, but ſo much the more liable to grow rancid and corrupt. The fiſh-trade is ſo conſiderable, that the whole army, in this ſequeſtered and unfruitful region, can not only live upon its profits in ſpecie, but even grow rich and opulent by it.

Beſides theſe ſeaſons, in October and December they fiſh particularly for ſupplying the tables at the imperial court. The fiſh caught in theſe months are ſent by deputations, compoſed of perſons of merit, to St. Peterſburg or Moſko. The firſt deputation brings from 60 to 100, the ſecond upwards of 250 ſturgeons; for which the firſt deputation receives a preſent of 800 rubles, and the latter a preſent of 1000 rubles. The Kozak-chancery takes the money, repays the travelling and carriage charges, and preſents the deputies with ſabres mounted in ſilver; the beſt of which, for the foreman, coſts 40 or 50 rubles,

rubles, each of thoſe for the ſtarſchins, 15 or 20, and thoſe for the common men 9 rubles each. All the ſabres have inſcriptions on them.

The women, as they neither ſpin nor weave, but pay for what they wear, live lazily and well, but are regular and cleanly in their domeſtic affairs, and take care to keep a good table, excellent beer, mead, and brandy.

Excepting that their clothes are of better materials, the Kozaks of the Ural dreſs in all reſpects like thoſe of the Don, and are only diſtinguiſhable by the peculiar form of their cap.

The people paſs their time in one continued ſcene of wanton, idle gaiety, not without licentiouſneſs. From morning till night they are gadding about, babbling, ſinging, and carouſing. At their marriages the young folks mutually preſent each other with their wedding-clothes. Before the bride a flag is borne to church, which ſhe follows covered with a veil. The feſtivities on the occaſion conſiſt in dancing, ſinging, and drinking, and running about the ſtreet, the houſes being ſo ſmall they can only contain a few invited gueſts to ſit at table. The huſbands treat their wives with far more gentleneſs and indulgence than is cuſtomary among the Ruſſians; therefore they are free, gay, ſhrewd, and handſome.

Their

Their irregular manner of living ſeldom admits of their reaching to a very advanced age; but they enjoy a good ſtate of health as long as they live, ſo that they have no regular phyſicians among them. Surgeons, however, are ſent to them from time to time to ſet them to rights when the venereal infection rages in their diſtricts.

Excepting the Kozaks in Iletzkaia, who form a corps entirely ſeparate, all that inhabit the collateral towns are in ſome reſpects dependent on the main-chancery, and are altogether ſupported from the chief town. To theſe are added the indigent and infirm people; and, as they are very much cramped in regard to the benefits of the fiſhery by the principal corps, they are idle and ſpiritleſs, but otherwiſe in dreſs and manners they are completely in the taſte of the genuine Uralians. Each place has its ataman, its other officers, and its peculiar chancery.

The laſt, and in its origin the moſt remarkable branch of the great donſkoi family, that we ſhall here mention, are the SIBERIAN-Kozaks. Inſtigated by a diſpoſition to roaming and to pillage, conſiderable multitudes of donſkoi-Kozaks, in the ſixteenth century abandoned their homeſtead on the Don, in order to rob and plunder the countries lying eaſtward. In their predatory expe-

ditions

ditions they were not only dangerous to the newly-acquired ruſſian poſſeſſions on the Volga, but they even ventured to embark on the Caſpian, where as enterpriſing pirates they ſoon became formidable to all the bordering nations. At the time that deſolating ſwarms of robbers were ſpreading terror on every ſide, Ivan II. ſat upon the ruſſian throne. The efforts of this prince to reſtore order and ſecurity to the provinces he had conquered from the Tartars, and to give vigour to the commerce with the neighbouring aſiatic nations, had ſcarcely ſtruck root, when the flagitious ſpirit of depredation on the part of the Kozaks threatened to fruſtrate his faireſt hopes. He, therefore, in the year 1577, aſſembled a conſiderable army and got together a fleet of ſhips to chaſtiſe theſe audacious hordes, and to reſtrain them for ever within the bounds of duty. Panic-ſtruck at theſe mighty preparations, the robbers diſperſed and fled into the neighbouring regions. A company of between 6 and 7000, proceeded, under the conduct of their ataman Yermak Timofeiyef, along the rivers Kama and Tſchuſſovaiya, onwards to Permia, and aſcended the Ural mountains. Here Yermak ſaw before him the immenſe tract of country which we now call Siberia; unknown wilderneſſes and ferocious tribes, never ſeen by the reſt of mankind, ſeemed

neceſſarily

neceſſarily to ſet bounds to his farther progreſs; but animated by courage, and delighted with the bold idea of being here the founder of a new and extenſive empire, Yermak, with his handful of armed companions, marched down the ſide of the Ural chain, defeated the tartar khan Kutſchum, preſſed forwards to the Tobol and to the Irtiſh, and to the Oby, and ſubjugated on this aſtoniſhing expedition, Tartars, Vogouls, and Oſtiaks. Fortune had done much for Yermak, and Yermak had done every thing he could for being worthy of his ſucceſs, but ſhe denied him the enjoyment of his heroic enterpriſe. His little army, waſted by battles and fatigues, was not ſufficient to maintain a tract of ſo many thouſand ſquare miles, and to keep in obedience ſuch a number of conquered nations. In the impoſſibility of completing his conqueſt by the eſtabliſhment of a ſtate, he reſolved at leaſt to reſcue from oblivion the memorial of his atchievement, by raiſing for poſterity an indelible monument of the boldneſs of his genius. He accordingly in 1581 made over his conqueſts by a formal capitulation to tzar Ivan; who, in return for this important ſervice rendered to the country, abſolved him from all reſponſibility for his former undertakings to the detriment of it, and nobly rewarded his magnanimity and his talents.

If

If ever a grand project was brought to effect by small and insignificant means, it was certainly in this conquest of Siberia; and if the man who was capable of conceiving it, and with such means of accomplishing his purpose, merits the appellation of a great man, then posterity cannot refuse that name to the conqueror of Siberia. — Yermak had not the good fortune to see his plan of conquest ripen to perfection. He died in 1584; but after his death the discovery and conquests were prosecuted, by regiments of donskoi-Kozaks sent thither for that purpose, as far as the eastern ocean and the mountains of China; and in the middle of the last century this whole part of the world was already a russian province. — As well those who were implicated in Yermak's rebellion, as the Kozaks who had more lately come to Siberia remained in that country as a militia to keep the reduced nations in obedience. Most of them married with the natives of all nations; many of those who came afterwards brought their families with them. This was the origin of the siberian-Kozaks, whose number at present far exceeds 100,000; but of whom the greater part carry on trades as burghers, and only about 14,000 do military duty as proper Kozaks.

We pass on now to the remaining branches of the slavonian stock, which either wholly or in

part are inhabitants of the ruſſian empire; confining ourſelves to the moſt ſtriking reſults in the account we ſhall give of them, as the greater part have their own hiſtories, which only in certain reſpects have any connection with our preſent plan.

2. Of the three ſlavonian nations, properly ſo called, that are inhabitants of the ruſſian empire, next to the principal nation, the POLES are the moſt numerous. According to the ruſſian yearbooks, (for domeſtic accounts are here entirely wanting,) this people, at the ſame time with the ruſſian Slavi, and on the ſame occaſion, came from the Danube to the Viſtula. Their ſtate, now nearly extinct, was probably founded in the ninth century; though they firſt appear in hiſtory only at the cloſe of the tenth. Notwithſtanding they ſprung from one ſtock with the Ruſſians, the two nations were almoſt continually involved in hoſtilities, now threatening the one, and now the other with deſtruction, and which finally terminated in depriving the Poles of their exiſtence as an independent nation. For rendering the mutual relations of the two countries more perſpicuous, it will be neceſſary to diſtinguiſh two periods: the preponderance of the poliſh ſtate over the ruined ruſſian empire; and

the triumph of the latter, with its increaſing power, over the declining poliſh republic.

The former period dates its origin from the unfortunate battle on the Kolka, in which the combined power of the ruſſian princes was defeated by the Tartars, and in its conſequences brought Ruſſia under the dominion of theſe furious conquerors. During the whole period of the tartarian oppreſſion, and even for a long time after, the Poles and Lithuanians, leſs haraſſed by the mongole-tartarian hordes, maintained a decided ſuperiority over the ruſſian ſtate, enfeebled by its partition and the abuſes of a foreign ſovereignty, and managed it ſo profitably that they ſeized on a great part of the fineſt provinces of that empire. The ſeveral principalities of Smolenſk, Polotſk, Tur, Vitepſk, Lutzk, Briænſk, and Pereyaſlavl, and the whole grand-dukedom of Kief, with various other tracts of country, the enumeration whereof would be tedious, fell, in theſe times of devaſtation, by force of arms, to Lithuania; and on the union of that ſtate with the kingdom of Poland, became part of the poliſh empire. After their emancipation from the tartarian yoke, it occurred to the ruſſian princes to proſecute their claims to the captured provinces; but the fortune of war is too changeable

able always to favour the righteous cauſe, and the greateſt and fineſt part of the loſt territories remained with impunity in the hands of the uſurpers, who dared to abet by their arms the reſiſtance of ſeveral of the ruſſian provinces againſt the ſovereignty of the empire. The domeſtic diſturbances which afterwards weakened Ruſſia, notwithſtanding the reſtoration of the integrity and indiviſibility of the empire, were ever furniſhing the Poles with pretence and occaſion for meddling with its internal affairs. During the deplorable anarchy cauſed by the falſe Demetriuſes, they conſtantly, by the ſuggeſtions of a refined and ambitious policy, took part with one or the other uſurper; and, when at length the poliſh prince Vladiſlaf was called by their influence to the ruſſian throne, they not only recaptured Smolenſk, but even made themſelves maſters of Moſco. Indeed the election of a native prince, and the expulſion of the Poles from the capital reſtored order and tranquillity to the empire; but once more, and for the laſt time, its independency was to be purchaſed. The peace which ſecured the throne to the new tzar Michaila Romanof, and diſmiſſed the Poles from Ruſſia, obliged that prince to relinquiſh the provinces of Smolenſk, Severia, and Tſchernigof. With this laſt degradation, however, the

poliſh influence ceaſed; the preponderance of this ſtate was gradually declining, and the inexorable Nemeſis brought on the period when the Poles were obliged to do penance by a long ſeries of misfortunes, even to the diſſolution of their national exiſtence, for their miſtaken or ill-ſupported call to the dictature of the north.

Already under the ſucceſſor of the politic but humiliated Michaila, Ruſſia completed the wide circuit of her territories by reconquering her raviſhed provinces; and the grand-dukedom of Kief, after a long ſeparation, united again with the parent-ſtate. In proportion as Ruſſia, by the vigorous transformations of Peter the great, increaſed in inward ſtrength and outward conſequence, Poland was ſinking, through the defects of an ill-organiſed conſtitution, into a political imbecility, the conſequences whereof were but too ſoon viſible to the diſadvantage of the nation. — The cauſes of this decline belong not to the plan of the preſent undertaking; and the progreſs of the ruſſian ſuperiority, with the ultimate conſequence of the unequal relation of the two ſtates, has been already mentioned in its moſt eſſential periods.

According to the preſent ſtate of the ruſſian empire, the Poles, excepting the chief nation, form the moſt conſiderable part of the aggregate population.

population. They are either by millions together in the governments of Polotſk, Mohilef, Minſk, Brazlau, Vofneſenſk, Podolia, Volhynia, Vilna, and Slonimſk; or in ſmaller numbers as coloniſts, in the circle of Selenghinſk, on the Irtyſh, and in various other parts of the empire.

The ruſſian Poles, like all the nations of Ruſſia, enjoy their belief, and the liberty of external worſhip without any moleſtation; only they, no more than others, may not make proſelytes from the greek church, nor hinder their brethren in the faith from voluntarily going over to the eſtabliſhed perſuaſion. They enjoy moreover all the privileges of the predominant nation; and obſerve the manners and cuſtoms of their own country, as cloſely and as long as is agreeable to themſelves. As all theſe, no leſs than their exterior and moral character is already known from other writers, I paſs it by, with only this remark, that, the Poles being Slavonians as well as the Ruſſians, both ſpeaking the ſame language, only in a very different dialect, and in character, manners, and uſages, having many things in common, the former more quickly aſſimilate with the latter than other nations of foreign extraction, ſpeech, character, and manners; ſo as to incorporate as it were, and be united with them.

3. The third ſlavonian nation within the borders of Ruſſia, are the SERVIANS or SERBES, a branch of the illyrian Slavi. By the denomination of Illyria, was originally underſtood no more than the eaſtern coaſt of the Adriatic. In the fourth century the appellation of Great-Illyria ſprung up, which comprehended almoſt all the roman provinces in the eaſtern part of Europe, between the Adriatic and the Danube, and even quite to Pontus. At preſent that country is divided by its ſovereignties into the venetian, hungarian, and turkiſh Illyria. Of the latter the kingdom of Servia is a part, having received its name from the inhabitants. The Turks call it Laſs Vilayeti, or Lazarus-land, becauſe in the year 1365, when they ſubdued it, Lazarus was prince of Serbia. It formerly conſiſted of two provinces, the proper Serbia and Raſcia, and the inhabitants were accordingly diſtinguiſhed into Serbians and Raſcians.

The Servians and Raitzes in the ruſſian empire are coloniſts, to whom in the year 1754, a conſiderable diſtrict was allotted on the Dniepr near and upon the poſſeſſions of the zaporogian Kozaks. This country, which got the name of New Servia, was, for the moſt part, an uninhabited deſart, extending to the then poliſh borders, by which it was ſurrounded on three

ſides.

ſides. The Serbians who voluntarily ſettled here in conſiderable numbers, were formed into a military aſſociation, to be a check upon the diſſenſions and exceſſes of the Zaporogians. In the year 1764, the whole of this tract of country was erected into the government of New Ruſſia, and at preſent forms a conſiderable part of the province of Ekatarinoſlaf.

There are ſtill two other tribes in the ruſſian empire, which, notwithſtanding the obſcurity of their origin, are ſuppoſed to be related to the Slavi. Theſe are, the LITHUANIANS and the LETTISH; the latter alſo compriſe the KURES among them.

4. The lettiſh race, to which the Lettes, LITHUANIANS, and old-Pruſſians belong, was not a primitive ſtock, as the finniſh, the germanic, or ſlavonian, but a diſtinct branch, now become incognizable, of the Slavi, which at the ſame time evinces a near affinity with the Vendi. The conformity of the lettiſh with the ſlavonian and old vendiſh language, and the ſameneſs of their antient mythology, gives to this ſuppoſition a high degree of probability. — The appellative Litva, by which the Lithuanians call themſelves, is found in Neſtor's chronicle ſo early as the eleventh century, who enumerates the Lithua-

nians among the nations tributary to the ruſſian monarchy; which could not find means to render itſelf an independent nation till the time when dangerous inteſtine diviſions ſprang up in Ruſſia under the ſucceſſors of Vladimir the great. She freed then herſelf from the ruſſian ſupremacy, enlarged her borders at the expence of her former maſters, and at length grew to be a power, formidable alike to all her neighbours. In the thirteenth century Ringold firſt appears under the title of a ſovereign grand-duke. His ſon Mendog profited by the tartarian incurſions into Ruſſia for marching forth to make conqueſts here: under him and his ſucceſſors the whole of lithuanian Ruſſia, together with Volhynia and other provinces *, fell off by degrees from Great Ruſſia. Gedemin, one of the moſt renowned of theſe princes, drove the Tartars out of Kief, and ſubjected that grand-dukedom to him. Yaghello, one of his ſucceſſors, of another race, cauſed himſelf to be baptized in 1386, married the poliſh queen Hedvig, and united Lithuania in perpetuity to the ſtate of Poland; in conſequence of which union the conquered ruſſian provinces devolved to that kingdom. Since that

* See the article, Ruſſia and Poland.

period

period Lithuania has conſtantly followed the fortunes of Poland; and, with the gradual extinction of it, has likewiſe fallen a prey to her ſtronger and powerful neighbours.

At the partition of the year 1773 Lithuania furniſhed the whole ſhare which Ruſſia at that time obtained, and out of which the preſent viceroyalties of Mohilef and Polotſk are formed. In the ſubſequent partition of the year 1793, this grand-duchy again loſt 1731 ſquare miles and 850,000 ſouls, which now belong to the viceroyalty of Minſk; but the larger portion which Ruſſia got on this occaſion, was taken from Little-Poland. In the final partition of the year 1795, the laſt remains of Lithuania alſo fell to the ruſſian empire, of which at preſent the viceroyalties of Vilna and Slonimſk are compoſed. Theſe provinces of the ruſſian empire are therefore thoſe in which Lithuanians reſide, but the number of people of which this nation conſiſts can hardly be given with any degree of accuracy, as they are every where mingled with Ruſſians and Poles.

5. The LETTES were originally one people with the Lithuanians. Both nations ſpoke the ſame language, (as even at preſent the lettiſh can only be conſidered as an altered dialect of the lithuanian,) and their very names ſeem in fact

fact to be the same *. Till towards the end of the twelfth century Livonia or Lettland was entirely unknown to the german historians; it is mentioned only by Danes, Swedes, and Russians: by the two former on occasion of their piracies, and by the Russians for denoting their dominion over that country.

The provinces on the Baltic, now known by the names of Livonia, Esthonia, Kurland, and Semigallia, belonged in the earliest times to the russian state, and had even a share in the founding of it. Nestor †, the oldest and most authentic russian annalist, names at least among the tributary nations, Litva, Semigola, Kors, and

* We find in the accounts of the middle ages the following denominations used without distinction: Letthania, Letthovia, Litthavia, Litfonia, Lottavi, Litthvini, Letthovini, Litthvani, Lettones, &c. Probably the Lettes obtained their particular name from their first homestead. In the circle of Valk, not far from the town of Venden, a river named Leete takes it rise. This river is called in lettish *ta Latte*, and a Lette is in their language Latvis, a man living by the river Latte. It is not unlikely that *Lettgallia*, so frequently mentioned in the annals, is from the same origin. *Leitis* means in lettish a Lithuanian, and *gals* the end, therefore the country which borders on Lithuania. *Tunnaus*, hist. of Livonia and Esthonia, vol. i. p. 17.

† See an account of Nestor and his chronicle, &c. in the Selections from foreign literary Journals, printed for Debrett, 2 vols. 8vo. vol. ii. p. 293, & sqq.

Lif:

Lif: that he does not expreſsly mention the Lettes may probably proceed from their not being at that time a particular nation diſtinct from the Lithuanians. The dominion of the Ruſſians over theſe nations is thenceforward confirmed by ſeveral additional teſtimonies. When the Germans had ſettled in Livonia, Meinhard did not dare publicly to preach, till Vladimir, grand-duke of Polotzk had firſt granted him permiſſion; "becauſe (as Henry the Lette affirms) the "heatheniſh inhabitants were tributary to him." It is obſerved by the ſame native chronicler, that the Lettgallians are of the greek religion; and that the Ruſſians in ſeveral places baptized the heathens. In the year 1209 biſhop Albert openly ſhewed the ſupremacy of the ruſſian grand-dukes, when in a treaty of commerce, which he entered upon through the teutonic knight Arnold, he gives ſecurity for the payment of the cuſtomary taxation, and in the year 1211, at the treaty of peace with Vladimir, he completely concedes the tribute.

Certain as it is, from theſe and many other indubitable teſtimonies, that the diſtricts inhabited by Lettes on the Baltic (or on the varagian ſea, as the ruſſian annals ſay) already belonged to Ruſſia in the earlieſt periods of its monarchy; it nevertheleſs appears, that Livonia had then no

ſettled

ſettled conſtitution, nor was bound to the parent ſtate by any firm political tie. Satisfied if the tributary nations only paid their tribute, the ruſſian grand-dukes, according to the cuſtom of the age, left the civil conſtitution to the inclination of the Lettes, who therefore knew of no other magiſtracy than their elders, whom they ſtill, from the ſlavonian term Starſchina, ſtyle Staroſts: the Ruſſians even made no oppoſition to the attempts of foreign conquerors, who were beginning to erect a new ſovereignty here. Thus it happened, that theſe countries, particularly during the civil diſſentions which preyed upon the vitals of Ruſſia, gradually quitted their looſe connection with that empire, and could not afterwards, notwithſtanding the repeated efforts of the ruſſian princes, be brought back to a reunion, till Peter the great revived the claim which belonged to his ſtate from the very foundation of it in the true import of the word, and indeed by a transfer from the people.

To the reſt of Europe Livonia remained generally unknown, till in the year 1158 it was diſcovered by ſome merchants of Bremen on their ſearch for new branches of commerce towards the north. Theſe mariners landed at the mouth of the Duna, opened a trade with the inhabitants, returned thither ſeveral times, and at length

length proceeded, with the consent of the natives, along the shore of the Duna, many miles up the country. About eighteen years after the discovery, an augustine monk, named Meinhard, settled in Livonia, who made the Livonians christians, and himself their bishop, whereupon many Germans at various times were induced to repair thither also. Towards the end of that century, Knut VI. king of Denmark, made an expedition to Esthonia, got possession of that province, and provided the converted inhabitants with priests and churches. For conquering and keeping Livonia, the bishop in the year 1201 founded the order of the Sword-brethren, a sort of knights Templars, and granted them the third part of the country with all rights and sovereignty. These knights were all Germans, who converted the natives to christianity with great success, though not without bloodshed, and made them their vassals. They afterwards united themselves with the teutonic order in Prussia, to whom Valdimar III. king of Denmark, in the year 1386, sold Esthonia for the sum of 18,000 marks of standard gold. In the year 1521 the livonian heermeister Plettenberg again separated from the teutonic order, and was admitted by the emperor Charles V. among the princes of the german empire. The

attempts

attempts made by tzar Ivan II. to reconquer theſe provinces which had been torn from the ruſſian empire, and the weakneſs of the order, which felt itſelf not in a capacity to reſiſt ſo powerful an enemy, at length in 1561 effected the complete ſeparation of the livonian ſtate. Eſthonia put itſelf under the protection of Sweden, Livonia united with Poland, and Courland was a peculiar dukedom under poliſh ſupremacy, which the laſt heermeiſter Gotthard Kettler held as a fief of that crown.

From this æra Livonia became the unhappy object of contention, for which Sweden, Ruſſia and Poland, for an entire century, were continually exhauſting themſelves in bloody wars. During this period it had once nearly become a peculiar kingdom *; but Sweden at laſt got the upperhand, and, at the peace of Oliva in 1660,

* Among the attempts made by tzar Ivan to obtain the ſovereignty of Livonia, one was by making an offer to the daniſh prince Magnus, in the year 1596, of this country under the title of a kingdom, reſerving to himſelf the paramount lordſhip, and an inconſiderable annual tribute. This propoſal was enforced by a ruſſian army of 25,000 men; and Magnus for a time actually ſtyled himſelf king of Livonia. This project, however, by the war which broke out upon it with Sweden and Poland, terminated ſo unfortunately, that Ivan even loſt his own poſſeſſions in Livonia, and Magnus obtained the biſhopric of Pilten during his natural life.

added this province to the poſſeſſion of Eſthonia. Both countries finally, after a war of twenty years, came to the Ruſſians by the treaty of Nyſtadt in 1721, and form at preſent the vice-royalties of Riga and Reval.

The events of the duchy of Courland till the year 1561, are interwoven with the hiſtory of Livonia, as, from the time of its conqueſt by the knights of the croſs, it conſtituted a part of the livonian ſtate. Gotthard Kettler, as above related, ſnatched from its ruins the new-erected dukedom as his proper ſpoil; and, from that period Courland appears in hiſtory as a peculiar ſtate. On the extinction of Kettler's male race the eſtates of Poland endeavoured to ſieze upon Courland as a lapſed fief, and to unite it immediately with the kingdom; but the couriſh nobility preſerved to themſelves, by the aid of the ruſſian court, the right of electing a new duke. Their choice in 1737 fell on count Erneſt John von Biren, who was ſucceeded in the government by his ſon Peter. — As, on the total diſſolution of the kingdom of Poland, the feudal connexion with it fell off of courſe, and the duchy, in its declining condition, thinking it could not ſubſiſt without a more powerful patronage, the eſtates of the country agreed in the

year

year 1795 by a free reſolution * to conſider the feudal conſtitution as demoliſhed, and unconditionally to ſubmit themſelves to the empreſs of Ruſſia. Their example was followed by the biſhopric of Pilten which had ſtood immediately under the crown of Poland.

The fate of poliſh Livonia deſerves a brief notice here. This tract of country, which, under the government of the teutonic order, formed likewiſe a part of the livonian ſtate, reverted in the year 1561, with the whole province of that name, to Poland. At the peace of Oliva, by which Livonia came under the ſovereignty of Sweden, this ſole diſtrict however remained to the poliſh ſtate, retaining from that time its name in contradiſtinction to ſwediſh Livonia. On the partition of 1773, this country, which had hitherto conſtituted its particular voivodeſhip, was annexed to Ruſſia, and now comprehends the two circles of Dunaburg and Reſitza in the viceroyalty of Polotſk.

We will now once more ſurvey the tracts of the ruſſian empire which are inhabited by Lettes. The homeſtead of this nation is not the whole of Livonia, but only a part of it which is called

* See Life of the Empreſs Catharine II. vol. iii.

Lettland;

Lettland *; the Kures in Courland, Semigallia, and the biſhopric of Pilten are true Lettes; by whom, in part, the lettiſh language is ſpoken in the greateſt purity: but this people is moſtly degenerated in poliſh Livonia, where they are mixed with Poles and Ruſſians †. The number of them at preſent, for want of proper ſtatements, cannot be accurately aſcertained; but in the viceroyalty of Riga alone, there were upwards of 226,000 Lettes, according to the laſt cenſus.

At preſent they are no longer known as a ſeparate people; they were mingled by imperceptible degrees, and at laſt blended with the Lettes, the Eſthes, and the Coures, or, as we uſually call them, the Lettonians, the Eſthonians, and Courlanders. The moſt viſible remnant of them is at Salis, where, in converſation with others, in the churches and ſchools, they ſpeak the lettiſh language; but in their houſes and among themſelves they uſe the antient lieviſh. The Liefs

* Livonia, or the preſent viceroyalty of Riga, conſiſts of nine diſtricts or circles, of which four compoſe what is properly termed Lettland. The remaining five circles are inhabited by Eſthonians

† Even the nobility, which, as in all the other parts of the antient livonian ſtate, is originally german, has, under the poliſh ſupremacy diſuſed the german language, and adopted that of the Poles.

that were ſome time ago diſcovered on the ſea-ſhores in Courland have been thought, and not without reaſon, to be run-away boors from Salis. To conclude, in regard to their exterior there is now no viſible difference between them and the Lettes.

The Lettes, or Lettonians, a people always peaceable, induſtrious, hoſpitable, frugal, and of ſomewhat better diſpoſitions than the Eſthonians, inhabited the greater part of the Venden diſtrict, and extended themſelves even into Dorpat; and therefore it is, that the chronicles mention the Lettes in Ungannia. That they were at all times a nation entirely diſtinct from the Liefs and Eſthes is evinced by their language, ſome particular cuſtoms, the general concurrence of hiſtory, and the implacable hatred of the two laſt-mentioned nations againſt them, which they were conſtantly exerciſing in ſcorn and oppreſſion. That averſion even ſtill ſeems not to be extinct; for the Liefs that live among them do not willingly intermarry with them, and the Eſthes are very apt to deride and deſpiſe them.

Their origin has been at one time ſought for among the grecian, and at others among the ſarmatian tribes. Without meddling with the controverſy whether they were formerly called Latzians,

Latzians, or were driven out by the Perſians, we perceive by their language, that they are of affinity with the Courlanders, or Coures, and properly of lithuanian, or in general of ſlavonian origin. In their language we find a mixture of other people, as it contains many words borrowed from the ruſſian, the poliſh, the eſthonian, the german, and even ſome apparently from the latin; which may be accounted for from their derivation, their migrations, and their mixture with other people. At preſent they occupy two diſtricts, which both together, after them, are called Lettland. By the augmentation they received from the Liefs, (now reckoned with the Lettes,) the Vendes, the Lettgallians, and the Eſthonians, they are now more numerous than they were in the twelfth century. The Lettes call themſelves Latweetis.

The Lithuanians live in the government of Polotſk and Moghilef: they, as well as the Lettonians, are intermixed with Slavonians and Finns, but chiefly with the latter, and are of the ſame confeſſion with the Poles.

SECTION II.

Finns.

A SECOND main ſtem of the nations dwelling in Ruſſia is that of the FINNS, of which, though not one branch (the Hungarians excepted, if we chooſe to reckon them among them) has ever riſen to a ruling nation; yet, as the common ſtock of moſt of the northern nations of Europe, is exceedingly remarkable for its antiquity and its wide extent, from Scandinavia to a great diſtance in the aſiatic regions of the north; and thence again to the ſhores of the Volga and the Caſpian. Diſperſed as all the finniſh nations are in this prodigious ſpace, yet the reſemblance, in bodily frame, in national character, in language, and in manners is preſerved. It is ſcarcely leſs remarkable, that the generality of the finniſh races ſtill dwell only in the north, which has ever been their favourite abode, and on which account they are likewiſe called inhabitants of moraſſes or fens; and the chace and the fiſhery have ever been with each of them their chief occupation and trade. So great a reſemblance ſeems to leave us in no doubt concerning the common deſcent of the nations that fall under this diviſion of our work; which of them, however, is properly the parent ſtock, can hardly be decided. The aboriginal name FINNS, already known

known to Tacitus, is in uſe with none of theſe nations; but they call themſelves by a different appellation.

As uncertain as the proper and original denomination of this people is, not leſs obſcure are alſo their origin and the early events that befel them.

None of theſe nations, ſome of them of very great antiquity, numerous, and far extended, (the Magyares excepted,) has ever played a conſpicuous part on the theatre of the world; no one of them has ever acquired a laſting independency, or produced a hero: but they have all, as far back as authentic hiſtory reaches, been a prey to their more enterpriſing and powerful neighbours. Accordingly they have no chronicles of their own; and their hiſtory is only to be found in the annals of their conquerors.

On taking a ſurvey of the whole extent of Scandinavia and Ruſſia, which is ſtored with finniſh nations, it is eaſy for the mind to conceive how the parent ſtem might come from the borders of Aſia to the Baltic, then to have roamed along the northern coaſt of that ſea, and to have ſpread on both ſides of it deep into the ſouth, till in proceſs of time it penetrated, here by Lettes and Slavonians, there by german Scandinavians, far into the north. But probable as this hypotheſis may be, few data for its confirmation are to be met with in hiſtory. It

names to us, indeed, from the ninth and the twelfth centuries, the Permians, the Finns, the Laplanders, and a few other tribes, which now are no longer known, or at leaſt ſolely by their names: but even of theſe we find only ſcattered accounts in the annals of the people who were concerned in trade with them; and the other finniſh races on the Volga and in Siberia have not been diſcovered till the recent progreſs of the Ruſſians into thoſe parts. All therefore that is known of their antient hiſtory is this, that they poſſeſſed the greater part of Scandinavia and Ruſſia in the north, and ſeparated into ſeveral tribes, which either lived entirely without any government, or, like the Permians and proper Finns, under their own kings. — All theſe were gradually ſubjugated by three nations, under the dominion of whom they ſtill remain: the Norwegians, the Ruſſians, and the Swedes.

The NORWEGIANS were the firſt who ſubjected a part of the finniſh north. Finmark has ever been tributary to them; yet it appears that long before the commencement of the tenth century, the whole tract from Vardhuys to the White-ſea was independent of them; and that only the remoter Finns about the gulfs of Bothnia and Finland, and on the Dvina, obtained their national freedom. The enterpriſing Norwegians were not content with letting out the conquered countries

countries to vaſſals, but they advanced to the independent diſtricts, particularly to Permia, partly for the ſake of commerce, and partly for the purpoſes of rapine and ſpoil. Theſe expeditions to Permia, which in time became regularly made every year, were firſt checked by the incurſions of the Mongoles into Ruſſia, and at length entirely ceaſed, when the princes of Novgorod made themſelves maſters of that country, and the commerce of thoſe parts.

The ſecond nation which diſperſed itſelf in the finniſh parts of the north, were the RUSSIANS; who, though at firſt, on their ſettling about the Volkhof, lived on good terms with their neighbours the Tſchudes or Finns, and even elected a government conjointly with them, yet they afterwards, later than the Norwegians, and earlier than the Swedes, conquered and ſubdued them.

Karelia, together with a part of Kexholm, ſeems to have been the firſt diſtrict of which the Ruſſians of Ingria made themſelves maſters. Wherefore all the ruſſian Finns, even ſuch as neither in regard to their place of habitation nor their deſcent were Karelians, but not till a later period were maſtered by the Ruſſians, were formerly called by the Norwegians Kyrialians. The Ruſſians at firſt had nothing but the region about the gulf of Finland, or on the Kyrialabotn, and about the Ladoga lake, quite up to the

White-ſea. They afterwards ſpread farther round in theſe deſert countries, where nothing was fixed by ſtated limits, and ſubjected to them a part of Finland. On the incurſion of the Mongoles, the expeditions of the Norwegians to Permia ceaſed: and now the Novgorodians began alſo to ſpread themſelves farther to the north; and in the fourteenth century Permia was converted to the chriſtian faith by biſhop Stephen.

Probably at the ſame time ſome Permians fled acroſs the White-ſea to eſcape this fiery zeal for making proſelytes; and thus gave the Ruſſians, who purſued their fugitives, the firſt occaſion for eſtabliſhing themſelves in Lapland. The latter now ſoon began to quarrel with the norwegian bailiffs, whoſe buſineſs it was to collect the tribute in theſe parts. They proceeded to acts of violence, and war began on the borders; when the Ruſſians, who were nearer and more powerful, obtained the advantage. They took in the ſequel, not only all Lappmark round Kola, but proceeded ſo far as to levy a tribute on the Finns in the preſent Finmark, and of thoſe who dwelt in Trumſen as far as Malanger. The other finniſh nations in the eaſt, on the Volga and in Siberia, became ſubject to them, with their gradual extenſion in theſe regions, by the conqueſt of the tartar kingdoms and the diſcovery of Siberia.

The

The SWEDES were the laſt who founded a ſovereignty in the finniſh parts of the north. It was not till the middle of the twelfth century that Erik the ſaint ſubjugated and converted the proper Finns; a hundred years afterwards the Swedes ſet foot in Tavaſtland; towards the end of the thirteenth century they eſtabliſhed themſelves in Karelia; and about the ſame time the Laplanders were alſo reduced to their obedience.

Thus then the whole of the finniſh north was partitioned among three ſovereigns, and the nation itſelf was removed from the rank of independent people. — We now leave the ſtationary point from which we ſurveyed the whole of its territory, becauſe henceforward there are norwegian, ſwediſh, and ruſſian Finns, and only the laſt are here the object of our attention. Of the thirteen tribes into which the finniſh ſtock divided, twelve belong either wholly or in part to the inhabitants of the ruſſian empire, namely, the Laplanders, the Finns, the Eſthonians, the Livonians, Tſcheremiſſes, Tſchuvaſches, Mordvines, Votiaks, Permiaks, Suryanes, Vogouls, and Kondiſh Oſtiaks. The Madſhares alone*, the great

* Magyar, as they call themſelves, or Ugrians, as they are termed in the ruſſian year-books, of which the modern Europeans have made Hungarians. — Schlœtzer reckons no more than twelve finniſh nations, for he excludes the Tſchuvaſches

great mass of the mixed multitudes whom we at present call Hungarians, are the only finnish nation which belongs not to Russia, and also the only one that has preserved its national independence.

1. The LAPPES or LAPLANDERS inhabit the extremities of the scandinavian parts of the north-eastward to the White-sea, between the 65th and the 75th degr. of north lat. Saxo Grammaticus, an historian of the twelfth century, mentions them first under this name, which signifies a sorcerer, and was given them by the Swedes; having been formerly comprised under the general denomination of Quenlanders or Kayanians. They call themselves Sabme-ladzh, (in the plural number Same,) and their country Same-ednam.

The modern Lapland, a country abounding in mountainous forests and lakes, is divided into the norwegian, swedish, and russian Lapland. To Norway belongs the north-western, to Sweden the southern, and to Russia the eastern part.

Tschuvasches from that stock, though he formerly joined them with it. Even this critical inquirer into history thinks the Finns an european parent-stock, (according to the interpretation which he gives to these words, *quos aliunde veniſſe nulla memoria eſt*,) as they possess almost the whole north of Europe, from Norway as far as the Ural; whereas the asiatic Finns seem to be only branches broken off.

According

According to the political diſtribution of the ruſſian empire, ruſſian Lapland forms only one circle of the viceroyalty of Archangel, the chief town of which is Kola, and is about 1000 verſts in diameter. The number of the ruſſian Laplanders, called by the Ruſſians Lopari, amounts to not much above 1200 families. When and in what manner this people probably came under the ruſſian government has been already noticed.

Schober, in his Memorabilia Ruſſico-Aſiatica, relates the ſtory of a Laplander, who had lived ſome time at Aſtrakhan *. This Laplander, on account of his uncommonly capacious memory, was the wonder of his time. He had been privately ſtolen away from his native country, when very young, and brought up at Stockholm; Charles XI. ſent him afterwards, with a conſiderable ſtipend, to Wittenberg, in order to ſtudy theology. It was thought he might be uſefully employed as a miſſionary to preach the goſpel to the Laplanders in their own tongue. Having finiſhed his academical ſtudies, he returned to Stockholm; where, on being examined at court, he was found to ſpeak latin readily, though in general faultily. He preached without heſitation,

* He is alſo ſpoken of by Weber, in veranderten Ruſſland, vol. ii. p. 165.

but

but alſo without ſenſe. The miniſtry of Stockholm thought him capable of undertaking, under the divine bleſſing, the work of converſion in his own country, and ordained him accordingly to make proſelytes in Lapland.

The converter of the heathen being arrived among his countrymen, found that rein-deer-milk and dried fiſh were no longer to his palate. Scarcely had he been there half a year, but he mounted a rein-deer, forſook his miſerable country, preſented himſelf at Stockholm in the dreſs of a common Laplander, and got a few pence from the populace by making a ſhow of his beaſt. Falling into extreme contempt by this degrading employment, he determined to repair to Denmark. About the year 1704, he made his entry into Copenhagen, ſitting on his rein-deer, amidſt a prodigious concourſe of people. He was conducted to the preſence of the king, to whom he gave himſelf out for a lapland prince: the people of the court made merry with him, and kept him generally drunk with wine and brandy. Under the ſame title he travelled into Germany, viſited the principal courts, and was ſeldom ſober. From Germany he proceeded to France, where, in one month he learnt the french language, and received very handſome preſents from Lewis XIV.; thence he returned

to

to Germany; and then traverſing Poland, he came into Ruſſia.

He had been only ſix weeks in St. Peterſburg, when he was able to expreſs himſelf with tolerable facility in the ruſſian language, even ſo as to preach in it before Peter the great, the archbiſhop of the province, and the great officers of ſtate. The emperor beſtowed on him a yearly penſion of 250 rubles, and ſent him to Aſtrakhan, in order to learn the tartarian language, which conſiſting of various dialects, is accordingly very difficult. He was actually maſter of it in a very ſhort time ſo as to ſpeak it fluently. But, living very looſely in Aſtrakhan, and being frequently ſeen lying aſleep in the ſtreets, drunk and ſenſeleſs; he was one day taken up by the Kalmuks, and privately conveyed out of town. He was brought before the khan Ayuka. The khan ordered his crown to be ſhaven in the manner of the Kalmuks, had him dreſſed in the kalmuk faſhion, and gave him two wives, both of whom were ſoon pregnant by him. He had hardly been four weeks among theſe people, ere he not only underſtood them, but alſo in caſe of neceſſity would talk intelligibly to them. The Kalmuks gave him horſes, took him with them on their hunting-parties, lived, ate, and played with him, and had not the ſlighteſt idea that

he would ever quit them. But as ſoon as he ſaw an opportunity, he made his eſcape, and returned to Aſtrakhan.

In this place he afterwards made himſelf maſter of the perſian, and the language of the ſubjects of the great Mongole; he alſo ſpoke the modern greek: but his diſſolute life, and his daily drunkenneſs, cut him off in the flower of his age.

Saxo Grammaticus, who flouriſhed about the cloſe of the twelfth century, is the firſt writer that ſpeaks of this country and its inhabitants; but, ſays M. de Voltaire, it was not till the ſixteenth century that we began to get any rude knowledge of Lapland, concerning which even the Ruſſians, the Danes, and the Swedes had but very faint notions.

This vaſt country, bordering on the pole, had only been noticed by the antient geographers under the names of the country of the Cynocephali, of the Himantopodes, of the Troglodytes, and of the Pygmies. Indeed we have learnt from the accounts given by both ſwediſh and daniſh authors, that the race of Pygmies is by no means fabulous; for, that they had found them near the pole, in an idolatrous country, covered with mountains, rocks, and ſnow, and overrun with wolves, elks, bears, ermines, and rein-deers.

The

The Laplanders, (continues M. de Voltaire,) from the univerſal teſtimony of travellers, ſeem to have no relation to the Finns, from whom they are made to deſcend, nor from any of the neighbouring people. The men in Finnland, in Norway, in Sweden, in Ruſſia, are blonds, large and well-made; Lapland produces none but men of three cubits in height, pale, ſwarthy, with ſhort, harſh, and black hair; the ſmallneſs of their head, their eyes, their ears, their noſe, their belly, their thighs, and their feet, diſtinguiſhes them entirely from all the people that ſurround their deſerts.

They ſeem to be a particular ſpecies formed for the climate they inhabit, which they love, and which they alone could love. Nature, who has put rein-deer no where but in this country, ſeems to have produced the Laplanders there; and, as their rein-deer are not in being elſewhere, neither do the Laplanders appear to have come from any other country. It is not probable, that the inhabitants of a country leſs ſavage ſhould have forced their way over mountains and deſerts of ice, for the ſake of tranſplanting themſelves in regions ſo barren, and ſo dark, that it is impoſſible to ſee clearly for three months in the year, and where the inhabitants muſt be perpetually changing their ſtations, in order

order to find the means of ſubſiſtence. A family may be thrown by a tempeſt on a deſert iſle, and may people it; but it is not natural to quit habitations on the continent which produce ſome nouriſhment, to go and ſettle a great way off, upon rocks covered only with moſs, in a dreary region of inceſſant froſts, amidſt precipices of ice and ſnow, where there is no food but rein-deer's milk and dried fiſh, and debarred from all commerce with the reſt of the world.

Beſides, if the Finns, the Norwegians, the Ruſſians, the Swedes, the Icelanders, people as far to the north as the Laplanders, had emigrated to Lapland, would their figure have been abſolutely changed? It ſhould ſeem then that the Laplanders are a new ſpecies of men, who for the firſt time preſented themſelves to our view and our obſervations in the ſixteenth century, while Aſia and America offered to our ſight ſuch numbers of other people, of whom we had no great knowledge. Thenceforward the ſphere of nature has enlarged itſelf on all hands to us, and it is therefore that Lapland is become an object truly worthy of our obſervation.

But to this it may be replied, that, if the natives of Lapland were of a different ſpecies from other men, we muſt admit the eternity of matter with the men born in different countries,

and

and begotten by others, without being able, whatever retrogradations we might make, to discover their firſt generation, unleſs we have recourſe to the fiction of the poets, for a people

qui rupto robore nati,
Compoſitique luto, nullos habuere parentes.

The information contained in the writings of Moſes apparently ſhews that theſe ſyſtems, with thoſe that the antient philoſophers have invented, on the origin of the human ſpecies, are ſo many fond conceits and falſhoods.

The greateſt difficulty lies in knowing how the children of Adam and Eve, who were white, could poſſibly have given birth to black men. But this difficulty has been ſolved in the preliminary diſſertation to the Univerſal Hiſtory, and in that of M. de Maupertuis on the white negro. They prove that the difference and the diverſity of climate, a greater or leſs diſtance from the ſun, &c. have produced this effect; and it is what experience confirms, at leaſt by analogy.

2. The FINNS, in the ſtricter ſignification, were already known by this name to Tacitus, which has been preſerved by the geographers and hiſtorians of later times, though without any accurate knowledge of the people. Properly they

were not again discovered till the year 1157, when the swedish king Erich the saint undertook their subjugation and conversion. They call themselves in their language Suoma-lainen, i. e. people who live in morasses; and their country Suomen-Sari, which signifies a marshy country with islands. Whence the name Finns arose is unknown *. By the Russians they are denominated Fini, but more usually Tschuchontzi or Maimisti, nasty people. The Ingrians, a particular description of finnish boors who have long dwelt amongst the Russians, and have adopted many of their customs with their language, as well as the greek religion, are still called in rus Ishorki, from the river Ishora or Inger, from which Ingermanland or Ingria has its name. They live likewise in the neighbourhood of Valday and Beyetsk, and are generally of the lutheran communion.

The country which is inhabited by this nation comprises the north-eastern corner of the bothnic and finnish gulfs, interspersed throughout with rocks, mountains, morasses, and lakes, between the 60th and 65th deg. of north lat. its circumference being computed at 30,000 versts. The greater part of it belongs to the kingdom of

* So says Schlœtzer. Georgi is of opinion that this is the gothic translation of Suoma.

Sweden;

Sweden; the ſmaller ſouth-eaſtern portion poſſeſſed by Ruſſia, contains Ingermanland, Kexholm, and Karelia, forming the government of Viborg, and part of that of St. Peterſburg. — That the Finns, in a very remote period, lived under their own kings, has been already ſeen, as well as that the Ruſſians very early got firm footing here, and formerly poſſeſſed far more than their preſent ſhare. In after-times theſe territories were again loſt; and Michaila Romanof ceded to Sweden the laſt ruſſian poſſeſſions in Finnland; but, by the treaties of Nieſtadt and Abo, Ruſſia got back the forementioned part of it.

In the government of Viborg the Finns make by far the greater part of the inhabitants, or more properly they are the people of the country. In moſt of the circles of the Peterſburg-government, they, with the Ingrians, are likewiſe the main body of the population; and in the governments of Tver and Novgorod they form conſiderable colonies, which have long been ſettled in theſe regions. The number of all the Finns living in Ruſſia is not to be correctly aſcertained; but they probably exceed 400,000 heads. — This people and the Laplanders are moreover the only two finniſh nations, whoſe lot has been caſt under ſeveral ſovereigns; all the other branches

of this ſtock belonging excluſively to the ruſſian empire.

3. On the ſouthern coaſt of the gulf of Finnland, over againſt Finnland proper, dwell the ESTHONIANS. This name, of like import with orientals, is of german origin; many other nations of the Baltic bore it; by Tacitus and Caſſiodorus it is employed to denote the borderers on the Amber-ſtrands: at length, however, it was confined to deſignate the ſmall tract of the forementioned coaſt. The Eſthonians have no name for themſelves collectively, but ſupply that defect either by Maa Rahvaſt, people of the country; inhabitant (in the ſingular number, Maa Mees); or if they would ſpeak more particularly, Tarto Rahvaſt, Perno Rahvaſt, people of Dorpat, of Pernau, &c. * In the ruſſian annals, where they play a conſiderable part, as they, in common with the novgorodian Slavi, founded the ruſſian ſtate, they are called Tſchudes. From them to this day the Peipus lake is called in ruſs Tſchudſkoie ozero, the Tſchudiſh lake.

That alſo this people, in the remoteſt times, belonged to the ruſſian monarchy, is beyond all doubt. During the inteſtine commotions with

* The Finns are called in the eſthonian, Somè Rahvaſt, or Somlanè.

which

which the grand-dukes had to contend among them, the Tſchudes indeed gradually ſucceeded in withdrawing themſelves from this ſovereignty; but, we alſo learn from hiſtory, that the ruſſian princes at ſeveral times found means to aſſert their right with vigour, and to compel the Eſthonians by force to acknowledge it. Thus, for example, Yaroſlaf found himſelf under the neceſſity to wage war upon the Tſchudes, and in the year 1030 to build Dorpat, (or Yurief, as the Ruſſians ſtill call that town,) that he might have a ſtrong place in the heart of their country, for the reception of the impoſts, and perhaps for keeping a garriſon in it. So Mſtiſlaf marched againſt the Tſchudes and Semgallians, on his reviving his demand of the tribute which they had been wont to pay: likewiſe in the annals of the neighbouring nations we find frequent evidence that no one ever doubted of the ſupremacy of the ruſſian princes over theſe countries.

The moſt remarkable of the cataſtrophes that befel the Eſthonians have already been noticed in the hiſtory of the Lettes. Since the year 1386, when Eſthonia was ſold to the Teutonic-order, it has formed a part of the livonian ſtate, with which, after a ſeparation of a hundred years, when it was under the dominion of Sweden, it again fell to the latter, and afterwards was

united to the ruſſian territory. The antient duchy of Eſthonia forms, in the preſent conſtitution of the ruſſian empire, the government of Reval; not only this province, however, but alſo the greater part of Livonia, or five circles of the Riga-government, are inhabited by Eſthonians. Their numbers in the former government can only be probably computed at 180,000; in the latter, by the laſt enumeration, were upwards of 257,000 heads. We ſhall certainly therefore not be miſtaken in ſtating their total amount at 430,000.

The Eſthes or Eſthonians, in the lettiſh language Iggaunis, have ever been the moſt extenſive and the moſt populous nation of Liefland; who, beſides Eſthonia properly ſo called, inhabited the diſtricts of Dorpat and Pernau, and ſtill maintain their ſettlement in them to this day. They even made frequent attempts to get firm footing in Lettland; but they were as often repulſed by the Teutonic order of knights, under their maſter Volquin, who repeatedly drove them back to their antient ſeats. Their language, manners, bodily figure, houſes, methods of huſbandry, are ſo many incontrovertible proofs of their relationſhip to the Finns; whom M. Schlœtzer juſtly pronounces to be one of the moſt far-ſpread nations of the globe, inhabiting,

from

from the ſhores of the Baltic, to regions deeply ſituated in Aſia. It is therefore no wonder that ſome Livonians have found nations in the heart of Ruſſia, whoſe ſpeech, by the help of ſome acquaintance with the eſthonian, they could partly underſtand; ſince the Finns, the Laplanders, the Eſthonians, Livonians, Permians, Syranes, Ingrians, Votiaks, Tſchuvaſhes, Tſcheremiſſes, Mordvines, and others, are deſcribed as nations of one common pedigree. The Eſthonians are the Tſchudi; from which appellation perhaps is derived the word Tchuchna, ſtill uſed by the Ruſſians to expreſs a liefland boor.

Their converſion, or more properly their compulſion, coſt the Germans much labour. Accuſtomed to war, to piracy, and to liberty, they long diſdained and reſiſted their inſolent authority. Some ſparks of that martial ſpirit, now almoſt extinct, ſhew themſelves, however, at times, in their fits of ebriety and revenge; and a relic perhaps of their old diſpoſition to piracies and hoſtile attacks on the neighbouring provinces may be ſeen in their preſent propenſity to theft.

Great wiſdom is not to be looked for among folks entirely occupied in the affairs of agriculture, paſturage, and fiſhing. Neither the eſthonian nor the lettiſh languages have as yet been

unfolded and enriched by art or ſcience; they are greatly deficient, eſpecially the eſthonian, in particular expreſſions; ſo that it muſt often be a difficult taſk to a village-preacher, to publiſh an edict in a faithful tranſlation, or to deliver a dogmatical diſcourſe to his pariſhioners, unleſs he be peculiarly endowed with the grace of condeſcenſion. Many a boor would accept of freedom with heartfelt gratitude; but neither gratitude nor freedom can the Eſthonian expreſs in his language; no more than he can exiſtence, duration, ſpace, and other abſtracted ideas. Among them are found perſons of great ſimplicity, eſpecially ſuch as live apart in the foreſts: the greater part are artful, (the Eſthonian more than the Lette,) eaſily comprehend a propoſition not lying too far beyond their ſphere, and frequently diſcover unexpected capacities only waiting for an occaſion to call them forth. Thoſe on the ſea-coaſt have always been able ſeamen, who, without previous inſtruction, venture far out to ſea, in veſſels of wretched conſtruction. In a ſhort ſpace of time, often within the compaſs of three or four weeks, they learn to read, and are dexterous in ſtealing an art from the german mechanics; accordingly we find among them goldſmiths, ſhip-builders, tanners, expert cooks, huntſmen, &c. Under the ſwediſh government, when

when the country was roused to support the feudal banner, they were useful soldiers. At the beginning of the present century, according to the current report, a boor of the district of Dorpat raised of himself a regiment, and signalized himself so much at the head of it, that he received a patent of nobility, with a haak of land, as the reward of his generosity and valour. Several have obtained baronies and military rank for their services in war; or, having successfully applied themselves to the sciences, have been put into various offices: persons of great consideration are now living, whose fathers or grandfathers were alienable boors. Very few lords will allow their boors to learn to write; fearing perhaps they may abuse that talent: they might be tempted to forge a passport or letters of emancipation. Some therefore teach themselves to write, without any help from others; and even under the total want of that art, they can keep, in a most surprising manner, long accounts of a hundred various matters, on sticks or tallies. About things of which they do not directly see the utility, they seldom give themselves any concern; and what they do not comprehend they admire but coldly. Children that are early become orphans scarcely know, at the age of 20, the names of their parents. It is too much the custom for school-boys to offer their pastor some flax,

flax, butter, or honey, to let them ſoon out of ſchool, and not force them to learn to read; to which end they are likewiſe very apt to feign all ſorts of infirmities, ſuch as hardneſs of hearing, dimneſs of ſight, weak memories, &c. but eſpecially of pretending to have a great fall or a blow on the head. Theſe and the like pretexts, however, become leſs frequent from day to day by the preſent ſcholaſtic inſtitutions, and will entirely be removed when there is a ſchool in every village, or every farm ſhall inſtruct its own children. To ſend little children four or five miles off to ſchool with their proviſions in their pouch, is too much for the poor vaſſal, who has ſcarcely the means for finding them in neceſſary clothes; grown up lads have no time to ſpare for ſchool, and would get the worſe for ſitting ſtill, to which they are not accuſtomed. A knowledge of the moral duties of religion, ſuited to their capacities, is ſoon obtained by old and young; yet however it be, ſcarcely two in a thouſand can tell whether they be chriſtians or not; unleſs it ariſes from this, that they are taught to conceive of religion as ſomething different from the leading a good life. The proverb in uſe among them, "He "knows not what faith he is of," does not merely imply a completely ſtupid fellow; for they would all reply that they are of the country-faith, or of the pariſh-faith. Thoſe who live among

among the Ruſſians, on the borders, frequently adopt their domeſtic and eccleſiaſtical uſages from them.

In Eſthonia are a great many large villages, ſome containing from 40 to 70 little clans; and with the ſtragglers may amount to a hundred diſtinct houſeholds: moſt of the Lettes live ſeparate. Even the Eſthonians at times ſhew a hankering after this primitive way of life, by which they are not expoſed to the inconvenience of keeping every one his own cow-herd, and at leaſt an old woman to look after the houſekeeping; on the contrary they are leſs confined, have fields, meadows, and paſtures near them, and ſuffer no damage from their neighbour's cattle. They have a particular affection to the woody diſtricts, both for the ſake of having a ſupply of firewood at hand, and an opportunity of clearing new fields whenever they pleaſe. One of theſe ſtragglers, or buſh-boors as they are called, will not eaſily be perſuaded to come and live in a village at a diſtance from a foreſt, though offered a far more fertile ſoil to cultivate, becauſe there they can unobſerved be continually laying out new ground in corn and hay fields, without paying any thing for them. Inferior landlords, who exact but little work from ſuch people, run the riſk of ſoon perceiving a want of ſtewards; and there have been inſtances of their letting the

the eſtate go to ruin, or even of ſetting their houſes on fire, in order to have a pretence for turning ſtraggler and enjoying the conveniences attending that way of life. For in that caſe they only work two days in the week at moſt for their lord; the reſt of their time is ſpent in idleneſs, or in working for their own profit: but in general they will only work when pinched by hunger, and the ſteward muſt give them, for ſmall ſervice, a piece of copſe, beſide finding him in meat and corn. To impoſe much work on the ſtraggler ſeems, on the other hand, very cruel, as he has no land from the manor, and muſt maintain himſelf and his children by his own labour. They and their children are ſometimes ſold, or bartered againſt other things, horſes, dogs, tobacco-pipe heads, in which the gentry here are very curious, as far as a hundred rubles being often given for one. A man here will not fetch ſo much money as a negro in the Weſt-Indies; one buys a fellow here for 30 to 50 rubles; if he underſtand any buſineſs, ſhoemaker, taylor, cook, weaver, &c. he may ſell for 100 rubles; you will pay about the ſame rate for a whole clan, one with another, the parents with the children; for a ſtout girl ſeldom more than 10, and for a child it may be 4 rubles.

Whether the proper names that appear in their old chronicles be the appellatives of entire caſts

or

or races, or of individuals, I cannot take upon me to determine. The fondneſs that many boors have for naming themſelves after the piece of ground poſſeſſed by their foreſathers for a long time, or at leaſt to retain the father's name, ſeems to favour the ſuppoſition, that a kind of family-name was not formerly quite unknown to them: perhaps, if it were of any conſequence, we might find them again in the names of different villages and farms, from which, as well as from animals, &c. they ſeem to be borrowed. Proper family-names, as we now bear them, nobody will expect to find in Livonia earlier than the twelfth century. At preſent the baptiſmal name always ſtands laſt; that of the farm, the father, or the landlord firſt: for example; an Eſthonian of the name Mik, living at a place called Mutta, calls himſelf Mutta Mik; his ſon bears the name Mutta Mikko Pong *, and his ſon, Mutta Mikko Pong Rein; and ſo his daughter, ſervant, ſtep-ſon, &c. The vaſſals change their name with every new landlord, or call themſelves after their fathers. Even a farm-holder muſt change his name whenever another plot of ground is given him to cultivate, unleſs he receive expreſs permiſſion from his lord to retain the old, or his father's name. Vaſſals that are made free commonly take a family-name, bor-

* Son.

rowed

rowed from their former place, or their father's: for inſtance; Hans, the ſon of Hunti Laur, is made free. He now aſſumes the name Hans Hunt; or, becauſe the latter word ſignifies Wolf, Hans Wolff, or Hans Laurſon. Their uſual chriſtian names, among others, are:

	Eſthniſh.	Lettiſh.
Adam	Adam, Ado, Oado	Adam
Agnes	Neto	
Anthony	Tœnnis, Tœnno, Tœns	Antins
Anne	An, Anno	An
Barbara	Warbo, Papo	Babbe, Babba, Barbel
Bartholomew	Pærtel, Pert, Pero	Behrtuls, Behrtmeis
Brigit	Pirrit	Birte, Brihte
Daniel	Tanni	
Dorothy	Tio	Dahrte
Elizabeth	Ello, Els, Liſo	Ilſe, Lihs
Eve	Eva	Yeva
George	Yurri	Yirri, Yurris
Gertrude	Kert, Truto	Geddo, Gehrte
Hedwig	Edo	Edde
Hellen	Leno	Lena
Henry	Hin, Hinno, Hinrik	Indriks
Jacob	Yakob, Yaak, Yoak	Yehkobs, Yahks
John	Yaan, Yoan, Yuhan, Hans	Anſis, Antzis
Katharine	Kai, Kaddri, Trino	Katrihn, Trihne, Katſha
Charles	Kaarl, Karel	Karl
Magdalene	Madli, Madle, Mal	Magdalena, Lena
Mary	Mai, Marri, Marret	Marri
Margaret	Kreet, Krœœt	Kret, Mahrgeet
Peter	Peter, Peet, Peeto	Peet, Peter
Sibyl	Pil	Bille.

The

The maſculine appellatives, Koort, Pell, Kæært, Tin; and the feminine Kell, and one very common in ſome places, Eile, in Eſthonia; and the Lettiſh, Laſhe, Ebb, which ſome interpret by Lucia and Ebertina, I do not preſume to tranſlate.

Rich boors would be ſought for here in vain. Such as (in ſecret) poſſeſs a few hundred rubles in hard caſh, with moveables to the value of a hundred or two more, are here and there to be found; they even ſometimes are worth more than their maſters; but then they muſt not let it be known. Some have juſt enough to ſatisfy the firſt wants of life; but ſtill more are poor. Formerly they were all much better provided. Among the Lettes, the landed property is not divided into ſmall eſtates, but remains in the hands of a few overgrown nobles, who, living in great opulence, neglect to look after the management of their country poſſeſſions, ſo that the produce of them does not amount to one third of what, with moderate attention and care, they might, to the great detriment of the proprietor himſelf, to the ſtate at large, and to the poor peaſants, who, though for the moſt part, more induſtrious than the Eſthonians, are generally in the extremeſt poverty. The latter neither want land nor an opportunity of making money,

if they have but time and inclination. The day-labourer, all the winter through, can earn his 10 kopeeks, and even more, by cutting wood and other employments, and in harveſt time may get weekly a couple of buſhels of corn. The foreſts, the breeding of cattle, the towns, the manor-houſes, the chace, and agriculture, furniſh them with opportunities enough for earning ſomething. Only by ſpinning for pay, the females find but little advantage; and yet in winter there is ſcarcely any thing elſe for them to do: in the worſt parts of the country they grow as much flax as will keep them in work during the whole of the long winter. The Eſthonian has often been reproached with lazineſs: charity might lead us to ſuppoſe that bondage and oppreſſion may have an influence on him, as well as on the Lettes; but he ſhews it even when working for himſelf: perhaps his feudal ſervice habituates him to it. And yet, both in town and country, there are great numbers who ſhew themſelves induſtrious, and purſue their own benefit with activity and diligence. The failure of a crop, diſeaſes among the cattle and horſes, ſoon reduce a boor to poverty; whom all the aſſiſtance he can get from the manorial meſſuage will not reſtore to his former condition. A man may have two horſes and a

few

few cows, and yet be very poor. How wretched are even they who are called landlords, or hoſts, of the farm, who have nothing but a horſe lent them from the manor! Creditable boors, poſſeſs, according to the quantity of their ground, from 5 to 10 horſes, and a herd of between 30 and 40 head of horned cattle. Both poor and rich eat chaff-bread, that is, without ſeparating the chaff from the rye; after threſhing, they grind and bake them both together. In thoſe parts of the country where the ungrateful ſoil rewards the labourer with but a ſorry crop, or the arable land is allotted the people in too great a diſproportion, both the Lettonians and the Eſthonians feed on the vileſt bread imaginable, fit for nothing but to burn, for it takes fire immediately on application to it: it is only on holidays that they bake a little bread of wheat or cleanſed rye, but never bolted. When their ſpirits and their pride are elated by ſtrong liquors, or ſometimes when they have a good-natured maſter, they are apt to betray their property, which at all other times they do what they can to conceal, leſt their work ſhould be increaſed, or, after their death, an unwelcome hæres univerſalis ab inteſtato ſhould come in for at leaſt an equal ſhare with their children, which, it is to be hoped,

does not frequently happen in our enlightened days.

None of the people here are comparable to the german peasants in muscular force, particularly as to lifting or carrying burdens, which, perhaps, may be owing to their habits of laziness, and their miserable diet. But they will hold out in great labours surprisingly; they bear vicissitudes of cold, heat, and continued wet, that would kill an Englishman or a German, and do a great deal of work, with little sleep. Their climate, their hard manner of life, together with early habitude, may contribute much to this, but especially their hot-baths, in which practice they run out of the extremes of heat, stark naked, into the open air, in summer plunging into a river, and in winter rolling themselves in the snow. Rheums, defluxions, colds, tooth-achs, ear-achs, &c. are but rarely heard of among them. With good-living their bodies soon get a sort of plumpness; but a truly fat man would be a strange sight indeed. Their stature is rather under than over the common size, and many of the women are unusually short. A tall fellow is sometimes to be met with.

Some authors deny them to possess either virtue or conscience, chiefly because they have no

no word in their language to denote them. But this is a manifeſt exaggeration. It is true the Eſthonian, as well as the Lette, terms conſcience, by a periphraſis, the teſtimony of the heart; and virtue he expreſſes by good actions: but, for love, pity, patience, placability, gentleneſs, forbearance, and the like, they have their own proper terms. As in all other countries, there are very honeſt worthy people, among ſome that are otherwiſe: but even the predominant paſſions ſeem here to require a certain ſort of indulgence, when we take ſervitude, ill-uſage, oppreſſion, and a want of education into the account. The following ſtatement, however, is, alas! but too true.

Both Eſthonians and Lettonians, though not without numerous exceptions, are apt to indulge in inflammatory liquors. Without beer and brandy no pleaſure. Intemperance is a prevailing vice, whatever indigence and miſery it may coſt them. Old and young, huſband and wife, are ſeen carouſing in their families, and drunk in the krougs; only girls and ſome young women are exempt from this charge: the aged drink hard, and continually ſmoke tobacco. Neither remonſtrances nor woful experience can moderate this propenſity; they only ſleep away the fumes of liquor in order to intoxicate

themſelves afreſh; even ſucklings muſt taſte of the glaſs as often as the mother drinks.

A conſiderable part of their pleaſure conſiſts in ſinging and muſic. The former ſeems peculiar to the females; at weddings they have even profeſſed ſingers brought for the purpoſe; yet the men join in the tune as ſoon as the bottle has excited them to merriment. At their work in the field, at their play, the girls are always ſinging. Some have good voices and great natural talents; but the Eſthonians more than the Lettonians. The former ſing only in one key, but commonly in two parts; ſo that every line ſung by one band is repeated by the other. They have a great variety of ballads and tunes. In ſeveral of their nuptial ſongs they annex to every line the two words, Kaſſike, Kanike; which perhaps at preſent are void of meaning, though formerly they may have been expreſſions of tenderneſs. The Lettonians lengthen out the laſt ſyllable to a great extent, and ſing commonly in duets, one of them grunting out a ſort of baſs. The moſt uſual and probably a very antient muſical inſtrument with both nations is the bag-pipes, which they themſelves make, and ſound in proper time, in two keys, with great dexterity. M. Arndt has endeavoured to explain the eſthonian name of this inſtrument,

torropil,

torropil, though perhaps with not very great ſucceſs. Every kroug, where gueſts are invited by the ſound of this charming inſtrument, is ſure to be much frequented, eſpecially on holidays. The miſerable horizontal harp, and the fiddle, which the Lettes are extremely fond of at all their feſtivals, were firſt introduced among them by the Germans.

In their dances the couples conſiſt of old and young, frequently man with man, and woman with woman; one couple following quite cloſe at the heels of the other, ſo as to allow of but few variations. The Eſthonians keep always a $\frac{3}{4}$ or a $\frac{3}{8}$ time, make ſhort ſliding ſteps, and at the third ſtamp rather harder on the ground. The lettonian dance is ſomewhat different, and more like an artleſs Polonoiſe; they have alſo a ſpecies of country-dances.

As the Ruſſians, ſo the Eſthonians and Lettonians, eſpecially the younger ſort, place the ſwing among their favourite ſummer-paſtimes. At almoſt every village, and at every kroug, ſtands this machine, on which one or two couple divert themſelves at a time; which diverſion is in high vogue at Eaſter.

The exerciſe of ſwimming, ſo much recommended by Rouſſeau, is here the general amuſement in hot weather; all ages and ſexes take to

the water like ſo many amphibious animals: but it coſts many of them their lives, chiefly by going in when drunk.

All the boors, without exception, are paſſionately fond of ſcalding-hot baths, where they once at leaſt in every week cleanſe their bodies; a practice in many reſpects of great ſervice to them, from their hard and dirty manner of living. In the midſt of the moſt profuſe perſpiration, with the ſweat ſtreaming down their limbs, they go out and ſit to cool themſelves in the moſt intenſe cold, rubbing their bodies with ſnow, without feeling any bad conſequences from it. While in the act of bathing, they ejaculate all ſorts of pious wiſhes, ſuch as, God cleanſe me from all my ſins, as I am now cleanſing my ſinful body, &c.; then thank themſelves for the good waſhing, for the heating of the bath, and for the fetching of the water.

Infidelity towards their maſters, diſtruſt, a diſpoſition to cheat and to ſteal, frequent elopements, and the like, are their ordinary vices, and certainly take their riſe from the ſlavery in which they are held. They rarely rob one another; if any one is known to do ſo, he is held in abhorrence by his brethren; but ſo much the more ingenious are they in deviſing means to impoſe upon their maſters; and in general all

Germans.

Germans. The bolts, haſps, latches, rings, hinges, and matters of this nature, are all ſtole from the yards and outhouſes of the manor-houſe; let them be renewed as often as they may, ten overſeers would not be able to prevent it. The caſks of brandy which they convey to town, they have the art of tapping cunningly under the hoops, without touching the ſeal with which they are thought to be ſecured, and of introducing water to make good the deficiency. But, as they always carry a ſealed ſpecimen of the ſtrength of the brandy, they would preſently be betrayed, if they did not know how to evaporate a part of the vinous ſpirit by the dexterous application of heat and cold. They make the corn-ſacks pay toll in like manner, and then throw water upon them, or contrive to make a hole in the bottoms or ſides ſo as to have all the appearance of being fretted in the carriage. They ſeldom ſell their hops, but the buyer finds to his coſt that they have been adulterated by a mixture of bad wild hops, ſand, &c.

They have frequently riſen in rebellion againſt their maſters. In the year 1345 they roſe in Harrien, and in 1560 in the Viek; the ſame thing has happened in later times. Some years ago great numbers of them aſſembled, with the moſt blood-thirſty intentions, under a

leader, who taught them from the ſcriptures that all ſlavery was aboliſhed by the law of the goſpel; and, ſeduced by falſe rumours, artfully ſpread among them, a number of Lettonians were very lately incited to commit great outrages. Some have been even known to wiſh for hoſtile invaſions of their country, in order that they might mingle with the enemy and ſatisfy their vengeance. At times a lord or a ſteward is cruelly murdered. Examples are not wanting of their having carried complaints againſt their maſters, even to the ſupreme tribunals; and of their having brought them to legal puniſhment. Yet the generality of them are devoted with the ſincereſt eſteem and affection to their kind and humane maſters, and are enemies to all reſiſtance. In their revenge, even among themſelves, they know no bounds; committing a murder with the greateſt coolneſs and indifference, which they otherwiſe hold to be the moſt heinous of crimes.

Lying, curſing, and ſwearing are very current among them, endeavouring to make the moſt manifeſt falſehood paſs for truth, by ſuch dreadful imprecations, as, Let me periſh! May I be ſtruck blind! May God ſhower his judgments on my fields and cattle! which are as common a phraſeology with them as with the Greeks; and

and in ſimilar terms they expreſs their averſion towards others. At the ſame time they appear to have a great reverence for judicial oaths; relating numerous inſtances of the viſible judgments that follow perjury. How much ought their ſuperiors to encourage and cheriſh theſe ſentiments for enforcing a ſtrict adherence to truth! Whenever a lord attempts to perſuade or to bribe his boors to give a falſe oath, nothing is afterwards ſacred to them; even his perſon as well as his property are thenceforward in danger.

It will be neceſſary now to ſay ſomewhat of their religion. Even in Livonia it has undergone ſome alterations. The antient inhabitants of theſe countries were heathens; ſeveral ſuperſtitious cuſtoms, not yet entirely eradicated, and ſome monuments ſtill remaining are relicts of their antient worſhip. Of their ſuperſtitions but little need be ſaid; the ſubject would neither improve nor entertain us. One inſtance may ſuffice. Even the better educated boor cannot, without much pains and inward conflicts, ſuffer any ſpinning to be done in his houſe on Thurſdays for fear leſt the ſheep ſhould not thrive, or ſhould die of the rot: though, on being told that, when they have been obliged to ſpin on that day at the lordſhip, no harm has happened

happened there to the ſheep, they are ready enough to acknowledge that it is an idle notion. Some pretend that this fooliſh obſervance of Thurſday took its riſe from the nonſenſe of one of their brethren, who, in the year 1563, taught them to hallow that day, becauſe God, on account of ſome aſſiſtance he had received on a Thurſday, enjoined it to be obſerved inſtead of Sunday. The truth of the ſtory muſt be admitted on the teſtimony of the hiſtorian Kelch: but it gives no ſufficient reaſon for the particular abhorrence of ſpinning, as they do every other kind of work on that day. The cuſtom ſeems rather to have been kept up as a relict of paganiſm, and the more ſo, as the above-mentioned uncommiſſioned preacher found no very general acceptance with his brethren. Neither is the ſtory any proof of the peculiar ſtupidity of this people. More enlightened nations have adopted as articles of faith doctrines to the full as incomprehenſible.

Kelch and others mention ſome of their deities by name; but we ſhould cautiouſly examine their accounts before we give credit to them. The firſt converters of the Livonians were but little acquainted with the language of the people. They thought themſelves juſtified in deſcribing their pagan worſhip from its moſt odious ſide, and even

even with pious exaggerations; in order to give a pretext to the force that was uſed in theſe converſions, and to exalt their own merits, they heſitated at nothing. They charged the unconverted with all kinds of abominations, and particularly with polytheiſm: however, it has never been thoroughly proved. The Yummal of the Eſthonians, under which name they ſtill, in common with the Finns, the Laplanders, &c. worſhip the true God, might be known by more than one appellation, as we may well believe if we but bring our reflections a little homeward; or what is related of their other deities, as Thor, &c. was perhaps no more than various kinds of homage they thought due to inferior deities, or to the memory of heroes that had ariſen among them. The livonian paganiſm is affirmed to be perfectly ſimilar with that of the Celts and the antient Germans. Of theſe it is well known that they had no temples, but even deſtroyed them wherever they were found, becauſe they eſteemed the great ruling ſpirit of heaven and earth, whom they held to be one only God though they adored him under various names, too great and too exalted to dwell within walls, and to be incloſed in human ſtructures. Their religious rites they performed in the open fields, on the top of a mountain, by the ſide of a ſpring,

ſpring, or under the ſhade of a tree: ſuch places were ſacred. They believed in inferior deities, to whoſe government and care certain regions were allotted; they ſcrupulouſly avoided to offend, eſpecially in the ſacred places, theſe ſubordinate divinities, whom they imagined to delight chiefly in fire and water, as two beneficent elements, and therefore they threw into them bread, wax, and other offerings, as tokens of their veneration. In their groves they nouriſhed a ſacred fire. To ſpeak of the marriage and the birth of gods, they held to be indecent, and conſequently were unacquainted with female deities. They had a god, Thor, to whoſe influence they attributed all aërial phænomena. Statues they had properly none; nevertheleſs ſome are found among them which they probably borrowed from foreigners and their religion. — Of facts ſo notorious from the hiſtories both of the Celts and the Germans, no man will expect particular proofs. Let us then return to the Lieflanders, amongſt whom we find all theſe religious obſervances, even to the minuteſt article; and the ſame celtic and german god Thor adored as a patron in military exploits. It may reaſonably be affirmed, that the Lieflanders, as in the whole of their religion, ſo chiefly in its firſt principle, the unity of God (which they held from mere tradition,

tradition, without any more immediate revelation, though M. Jeruſalem, Dr. Leland, and others, abſolutely deny it to be held by any heathen nation) had a perfect reſemblance with the Celts and Germans: that all their ſuppoſed plurality of gods were but ſeveral names for the only Potentate, or were ſubordinate deities inveſted with amiable or formidable qualities, and held up to the admiration or the terror of mankind, or in order to preſerve the remembrance of eminently beneficent perſons; hence perhaps we may derive the origin of the tales invented by a holy zeal concerning their female deities. Among the Eſthonians we can find no intimations built on ſure grounds of the latter ſort, and in general but few names of deities. With the Lettes they are more numerous, but that they denoted ſo many really diſtinct ſuperior beings, it would be no eaſy taſk to prove. What I have been able to collect with any certainty concerning their nature, offices, rites, and repreſentations, I ſhall here ſubjoin.

Mahjaſkungs and Zeemniks ſeem to have been a kind of penates or houſehold gods; the latter particularly preſided over vaſſals and cattle, for which reaſon they ſacrificed in both kinds to him in autumn. Lulkis, likewiſe a kind of ſpiritus familiaris. Meehra Deeus, or Meſha Deeus, the

the god of wild beaſts, particularly wolves. Puſhkeis, the god of foreſts. Pilnihts, the god of plenty. Auſkuhts, the god of health and ſickneſs, chiefly worſhipped by the Lithuanians. Veitzgants *, the patron of betrothed perſons, particularly the bride. Gahrdehdis, the fiſherman's god. They alſo reckon up a few goddeſſes: Deevekla, generally called, by way of eminence, the goddeſs, contractedly Dehkla; who, it ſeems, was the tutelary deity of women in child-birth, by whoſe benign influences the new-born babes were lulled aſleep and made to thrive. Others aſcribe theſe effects to a Tikkla or Tiklis, while to Dehkla †, they conſigned the care of the children at the breaſt. Laima was the goddeſs that preſided over pregnant women; and Mahte was in general the childrens' goddeſs, known under ſeveral epithets; among others Peena Mahte, for whom they kept the domeſtic ſnakes, which they carefully fed with milk; and even to this day, in ſome houſes, eſpecially among the vulgar, the ſuperſtition is ſtill retained of dreading to drive the houſe-ſnakes out of doors.

Of the places and groves where the antient Lieflanders, as well Eſthonians as Lettonians,

* From gan veitzaks, it ſucceeds well.

† From the lettiſh word deht, to ſuck.

were

were wont to perform the holy rites of paganiſm, many, notwithſtanding the ſtrict orders that have been iſſued for their demolition, are ſtill in being, towards which they conſtantly teſtify an awful reverence. None chooſe to approach them, nor ever venture to cut a bough from a ſacred tree, or even to pluck a ſtrawberry that grows beneath its ſhade. If a German, out of wantonneſs or zeal, does an injury to theſe trees by cutting or breaking them, they ſhudder with the certain expectation of ſome impending judgment. Some of theſe ſacred places are diſtinguiſhable by one, others by ſeveral (moſtly oak) trees; on hills, in plains, or near a ſpring. Boors that are not deterred by the fear of diſcovery, and the penalties annexed to it, wiſh to be privately buried in theſe places; ſome of which perhaps originally owed their conſequence, not merely to religious rites performed there, but on account of ſome league or treaty concluded at them; and afterwards, by an eaſy tranſition among unlettered people, were conſidered as ſacred and inviolable. Rouſſeau has ſomewhere judiciouſly obſerved from antient hiſtory, that it was cuſtomary not only to take the gods to witneſs the covenant, but to make choice of certain ſtones, hills, and trees as memorials of the tranſaction. Inſtances of this

cuſtom are to be met with in the books of Moſes and the chronicles of the Jews. The ſentiment that the inferior deity, who delights to dwell in this ſpot, will revenge the violation of a monument marked out for calling to the minds of men the engagements they have mutually entered into in the preſence of their god, is of wonderful efficacy with rude and uncivilized people. Superſtitiouſly to viſit and revere all ſuch hallowed groves is ſtrictly forbidden: but faith ſuffers no reſtraint; and inveterate prejudice triumphs over reaſon. Several barons have commanded their boors to go and cut down ſuch trees; but neither threats nor perſuaſions would prevail till they inſpired the awe-ſtruck vaſſals with courage, by taking the axe into their own hands.

Offerings of wool, wax, yarn, bread, &c. are ſtill in uſe among them, by laying them on the holy places, or cramming them in the hollows of the aged trees. Springs and rivers likewiſe have their ſhare of theſe unbloody ſacrifices. But, eſpecially when any ſudden eruption or ulcer appears on their body, they ſay, it comes from ſuch a place, or properly from the earth; they therefore go to the place where they have laſt ſat down, or ſlept, or drank, and according to their opinion, got the harm: there they ſcrape

ſome

ſome particles of ſilver from a ruble, or from the neck or breaſt ornaments of their wives; and then, as nature commonly ſoon relieves herſelf, they take him to be a very ſilly man who ſhould doubt of the efficacy of the ſilver-ſcrapings. This may be conſidered as a propitiatory offering to the deity of the place. At their ſecret idolatrous aſſemblies, the keeping up of the fire, into which they throw all ſorts of offerings, is ſtill a principal obſervance.

If it be true that the Celts paid no regard to ſtatues and idols as neceſſary appurtenances of their worſhip, yet they were not altogether unacquainted with them; whether they borrowed them from other nations, or adopted them in ſome places as the inventions of ingenious perſons. In Liefland too they had idols, though perhaps in no great number. Kelch deſcribes one that they worſhipped under the figure of a crowned man; which muſt have been of a pretty large ſize, as they uſed to depoſit their offerings in a bowl fixed on his lap. In the library belonging to the Olai church at Reval, among other curioſities, is ſtill preſerved a liefland idol of the heatheniſh times, and is about four inches in height. As there were then no eminent artiſts in Liefland, the form given to this figure but poorly expreſſes that of a man: perhaps they were made merely in memory of their heroes.

We likewiſe find ſome few altars ſtill remaining; probably a ſort of table for offerings: however I ſhall not preſume to ſtate their peculiar deſtination. One is yet ſtanding in the Oberpaſchen, near the lordſhip of Kaverſhof, under the branches of a ſacred tree, in the hollow of which little offerings are ſtill frequently found. This altar, artleſsly hewn out of a large block of granite, is about two ells in height, ſomewhat of the ſame in length, but ſcarcely one ell broad; ſmooth at top, of nearly an oval form, ſurrounded by a frame riſing two inches above the foot. The foot, all of one piece with the flat of the table, is pointed downwards that it may ſtick faſt in the earth: that it is a relict of paganiſm, is confirmed both by common report and the evidence ariſing from the thing itſelf. After the reformation no field-altars were erected; in the times of popery they would have had a better ſhape, and would certainly not have been placed under a ſuſpected tree; in general the whole form of it contradicts the ſuppoſition that it was made after the introduction of chriſtianity. For domeſtic uſes it could not have been deſigned, as many boors even at this day have no table at all in their houſes, much leſs one of ſtone. — That their ſacred trees and groves renew themſelves by the caſual falling of their own ſeeds, or by ſecret plantation, ſcarcely needs be mentioned.

Proper

Proper idol-temples indeed have not been found in Liefland; yet, in regard to an antient wall ſtill ſtanding I have ſome doubts. It ſtands near the Vaſtemois, but in the precincts of Fellin-caſtle, on a little elevation in a foreſt much grubbed up. The wall is quadrangular, two ells thick, four fathoms long, and three fathoms broad. On each ſide are ſeen three ſmall windows; but none above the gate oppoſite. It is not exactly known whether they were formerly covered; nevertheleſs the boors unanimouſly relate, that in antient times, when the Fellin road ran that way, a traveller chanced to loſe himſelf in this foreſt, then very thick with trees, and in the anxiety of his mind here vowed to build a chapel, which he did accordingly, and beſtowed upon it the name of Riſti Kirrik, that is, the Croſs-church. — If we give faith to this ſtory, the builder muſt have been a chriſtian. — At preſent this dilapidated ſtructure is put to a very ſingular uſe. Every year, nine days before the feaſt of St. George, or, as they call him, St. Yurgen, in the night, great multitudes of boors, of both ſexes, and of all ages, from all the adjacent parts, aſſemble here, ſometimes to the amount of ſeveral thouſands, kindle a fire within the incloſure of the wall, into which they throw offerings of various kinds, ſuch as yarn, flax,

wool, bread, money, &c.; at the ſame time depoſiting all manner of waxen figures in the little apertures that ſeem to have ſerved for windows. Round the fire ſits a circle of beggars, who have the care of keeping it up; and for their trouble partake in the offerings. Of all the ſights in the world, this is ſurely the moſt ludicrous. All the barren women of the country round, dancing ſtark naked about theſe old walls; others eating and drinking with noiſy feſtivity; many more running in friſky gambols about the wood, and followed by young men, playing all ſorts of tricks, and talking all manner of ribaldry. Hitherto it has not been poſſible to put down this ſtrange licentious meeting; in the mean time all the circumſtances of it ſeem to ſhew that it is derived from the days of paganiſm. The offerings, the fire, the dancing, the licentiouſneſs, are manifeſt proofs of it: but then have we the remains of a heathen temple in Liefland? Without pretending to decide this queſtion, I find it not probable, that a people, known to be remarkably tenacious of their old inſtitutions, ſhould in modern times make choice of a place to meet in for their interdicted worſhip, which their fathers had not employed to a like purpoſe. What ſhould move them to it; ſince they would be better concealed, and be leſs liable to detection,

tion, in the far deeper foreſts at no great diſtance. The preſervation of the wall, through ſo many ages to the preſent times, may be owing to reparations carried on by ſtealth; the ſtory about the occaſion of building it, and the reaſon for its name may be all a fiction, in order to ſave the place from the deſtruction with which it was threatened by the chriſtians. The Celts and Germans had no temples; neither had the antient Pruſſians any: but ſimply from a quadrangular wall, we can draw no inference of a temple. We are told by a learned antiquarian *, that the Pruſſians had the ſacred foreſts, where they worſhipped their deities with fire and ſacrifices, ſurrounded with curtains or ſcreens. The Lieflanders may likewiſe have had ſcreens or fences for a ſimilar purpoſe; Kelch ſpeaks of hedges, which they ſet up in the foreſt around their idol. This was neceſſary at leaſt for keeping off the cattle that roamed at large. For the ſake of ſolidity and permanency they may eaſily be ſuppoſed to have changed the hedge for a wall, as is often done by the rude inhabitants of other countries as well as of Liefland; but long before the arrival of the Germans, here was a ſort of towns and permanent houſes, and in all proba-

* Dr. Arnold, in his compendium of the eccleſiaſtical hiſtory of Pruſſia, book i.

bility even ruſſian churches; and if this were not the caſe, yet this we know, that the Danes built monaſteries in the eleventh century on the coaſts of Eſthland. — Accordingly, we find incloſures, even walls, ſerving them inſtead of temples, without bearing that name, becauſe it is likely they were uncovered at top. This is delivered merely as an hypotheſis, which others, more deeply verſed in antiquities may think worth examining. To conclude, if the wall was actually built for a chriſtian chapel, yet the Eſthes found it not unſuitable for the performance of their heatheniſh devotions. Mr. Becker, in his little tract under the title of Livonia in ſacris ſuis conſiderata, poſitively ſays: interea in lucis ſive ſylvis iſtis neque templa, neque aræ, nec columnæ, nec idola fuerunt inventa; which is certainly advancing much more than he has authority for.

Not from the firſt pages of antient hiſtory, which are for ever veiled in obſcurity, nor yet from unwarrantable ſurmiſes; but, judging by antient uſages ſtill remaining, we perceive a great reſemblance between the old religious rites of the Celts and the Lieflanders, why ſhould it not be thought highly probable that the Liefs and Eſthes by their Yummal, and the Lettes by their Deeus, deſigned the ſole true God; in ſubordi-

nation

nation to whom they only admitted inferior deities as beneficent or malicious ſpirits. Perhaps it might be for this reaſon that the doctrine of the devil met with ſuch good reception, and is ſtill preſerved with ſo much reverence among them, inſomuch that they generally tremble at the mere recital of his miſchievous doings; imputing to him all the evil that happens in the world. Doubtleſs it is becauſe they think him like the dreadful deities they formerly imagined.

Among the Lettes and Eſthes alſo many remains of heatheniſm are ſtill obſervable; ſo that it ſhould ſeem as if the reformation together with all the learned opinions ſo ſcrupulouſly maintained by the biſhops, have not as yet been able to eradicate them. Their ignorance, then, which we muſt therefore believe partly invincible, with its attendant an unuſual ſenſuality, cheriſh their propenſity to purchaſe by ſacrifices and offerings a happy progreſs in their undertakings. In general, the benign influence of religion on their conduct is not perceptible by the moſt attentive obſerver.

In the twelfth century the Liefs and afterwards the Lettes, were brought to the profeſſion of chriſtianity by the Germans; but a part of the Eſthes by the Danes. Perhaps they already

knew it by name, through the Ruſſians who dwelt in the country. The Germans gradually introduced baptiſm over the whole of the iſlands as well as the firm land. The new religion got an outward ſplendor from the teutonic order, the inſtitution of biſhops, the foundation of monaſteries, and the appointment of prieſts; all was purely catholic. Nevertheleſs the Ruſſians have at all times had churches in Liefland; therefore in all the treaties entered into with the ſovereigns of Ruſſia, it is always an article that the ruſſian churches ſhall be kept clean and in good repair, and in all reſpects according to antient uſage.

In the year 1522, the reformation forced its way into Liefland, by a preacher, who, on being driven out of Pomerania, had fled to Riga, named Andreas Knœpken, or Knopf. It quickly ſpread itſelf far and wide, and was even favoured by the order. All followed Luther's doctrine; and the popiſh ritual, afterwards patroniſed on the part of Poland, had, on the whole, no influence to its detriment. During the ſovereignty of Sweden over theſe regions, a law was enacted, that whoever deviated from the doctrine contained in the ſymbolical books, ſhould be incapable of inheriting any lands or dues for ever.

Every

Every other religious practice was prohibited, and even to be present at it, under a penalty of 100 dollars silver money.

By the 10th article of the treaty of Nystadt, the greek religion is secured in the free exercise of its rites. In Riga there is a church for the use of the Calvinists; the catholics have not as yet built themselves a proper church, but perform their worship in a house fitted up for that purpose. In Liefland it may be justly said, that every man may follow his own persuasion in matters of religion without the least molestation.

In Liefland count Zinzendorf found also many friends to his church-institution. Its rapid progress, indeed, attracted the notice of government. Two of their followers, Eberhard Gutsleff, superintendant of Œsel, and another, a preacher of that place, on account of certain charges laid against them, were brought to St. Petersburg in 1747, with two other brethren, where the first died in prison of sickness in 1749, and the other was set at liberty in 1762. Since that event nothing has ever been attempted against the members of that fraternity.

Having already extended this section beyond what the limits I proposed to myself will properly allow, I am obliged to omit several particulars, and to reserve others for the part where I shall treat of this country as a province. I shall therefore

fore conclude for the preſent with ſomewhat concerning their language.

Mr. Hupel, to whoſe laborious reſearches the world is under great obligations, gives the following extract of a letter from M. Pritzbuer, provoſt of Marienburg: "A provoſt of Mecklenburg, of the name of Frank, has written an account of Mecklenburg. In the fifth century of his hiſtory I find the lettiſh paternoſter in Mecklenburg. Making allowance for the later improvements of the language, the imperfect knowledge of it in the firſt promulgators of chriſtianity, the miſtakes from frequent tranſcribing or printing, the ſtill uſual drawling out or expanding of the words, and the changing of ſome vowels, as a into o, alſo o into oa, and ee into i, as is cuſtomary in theſe parts, I conceive the matter to be very clear. I will therefore ſubjoin it as it comes to me, together with the correſponding words as they are now in uſe:

1. The old vendiſh:	Tabes	mus,	kas	tu	es
2. The preſent words:	Tehvs	muhſu,	kas	tu	eſſi
	Father	our,	who	thou	art

1. eeſhan debbes;	ſis	ſvetitz	tows	varetz;
2. eekſhan debbeſim;	eſſus	ſvetitihtz	taws	vahrds;
in heaven;	be	hallowed	thy	name;

1. enach mums tows	valſtibs;	tows	proatz	bus	ka
2. eenhk mums taws	valſtiba;	taws	prahtz	buhs	kà
come to us thy	kingdom;	thy	will	be	as

1. eeſhan

1. eeſhan debbes ta wurſam ſemmes; maſſe demiſhe
2. eekſhan debbeſim tà wirſu ſemmes; muhſu deeniſhku
in heaven ſo on earth; our daily

1. mayſe dus mums ſhoden; pammate mums muſſe
2. maiſi dohdi mums ſhodeen; pametti mums muhſu
bread give us to-day; remit us our

1. grakhe, ka mes pammat muſſe paradacken;
2. grehkus, kà mehs pamettam muhſu paradneekeem;
ſins, as we remit our debtors;

1. ne wedde mums louna badeke; pet paſſartza
2. ne weddi muhs launa kahrdinaſhana; bet paſſargi
not lead us in evil temptation; but deliver

1. mums nu wuſſe loune.
2. muhs no wiſſa launa.
us from all evil.

The Liviſh language is indeed ſtill in being; but, as it is confined ſolely to the boors in Salis, a tract not more than ſeven engliſh miles in length on the coaſt of the Baltic, and they ſo mixed with the Lettes, that they might rather be called Lettes than Liefs, is in danger of becoming, in no long ſpace of time altogether extinct, it may not be totally uſeleſs to preſerve ſuch words and phraſes as Mr. von Eſſen, ſuperior paſtor at Riga was able to gather up amongſt them.

God, *Yummal*
Heaven, *tauge*
The ſun, *pehva*
The moon, *kuh*
A ſtar, *tehd*
A cloud, *pillud*
Rain, *vihme*
Rainbow, *vickerkahr*

The

The earth, *mah*
Sand, *yuge*
Man, *imie*
The ſoul, *yenge*
The body, *lee*
The head, *peh*
The hand, *kehſe*
The foot, *yalge*
Fleſh, *oſſa*
Bones, *luh*
A garment, *vamſe*
A pelice, *kaaſka*
Trouſers, *vſadde*
Stockings, *tucka*
Boots, *ſapkad*
Shoes, *kenge*
The town, *nine*
The village, *kiulla*
The houſe, *ohne*
The church, *pækodda*
The preacher, *pep*
Huſband, *mehs*
Wife, *neine*
Child, *lapſe*
Father, *iſſa*
Mother, *yemmad*
Son, *pohge*
Daughter, *tubta*
Horſe, *ubbi*
Mare, *keeve*
Foal, *vahrſe*
Ox, *ehrge*
Cow, *neema*
Calf, *vaiſkas*
Ram, *ohnis*

Sheep, *lammaſe*
Lamb, *lammohui*
Boar, *orkas*
Swine, *ſhicka*
Pig, *porraſe*
Gooſe, *kohs*
Duck, *puhl*
Cock, *kicka*
Hen, *kanna*
Fiſh, *kallad*
Net, *virge*
Boat, *laia*
Sea, *merr*
River, *yogg*
Bridge, *ſhilde*
Mountain, *paald*
Stone, *kihv*
Bread, *lebe*
Salt, *ſale*
Butter, *vuit*
Milk, *ſehmde*
Rye, *rugid*
Barley, *odred*
Oats, *kahrd*
Wheat, *niſſud*
Peas, *yehrnde*
Beans, *pubbad*
Turnips, *naggrad*
Flax, *linnad*
Hemp, *kanne*
Garden, *tarra*
Apple, *ummare*
Table, *lohde*
Stool, *kreſle*
Bench, *penke*

Candle,

Candle, *kuhndel*
Candleſtick, *luckter*
The door, *uck*
The window, *ktp*
To hope, *lodhub*
To hear, *kulupp*
To ſee, *neeb*
To taſte, *ſhmeckeb*
To ſmell, *aiſtab*
To feel, *muiſtkab*
To go, *leeb*
To paſs, *brauzma*
To ride, *ratzt*
To ſow, *kiullab*
To ſit, *iſtob*
To ſtand, *rurtub*
To call, *rutz*
To obey, *kuhl*
To love, *milub*
To hate, *nidub*
To tell, *utlub*
To ſpeak, *pagateb*
To think, *mutlub*
To aſk, *kiuſſub*
Good morning, *yo omaga*
Good day, *yo paeva*
Good evening, *yo iddug*
What are you doing? *mis tei yutiet?*
Are you in health? *kas tei terud ohdi?*
Let us go, *uhrgemi leed*
Come with me, *tulgid min imis*
Stay here, *yeed ten*
Farewell, *illagid terronis*
Good night, *maggo terronis*
To keep a wedding, *kaſen piddahym*
To curſe, *vannup*
The devil fetch thee, *votha teid kurre*
May thunder kill thee, *putki las tei robg*
That is certainly true, *ſe om tohdſt en toihs*

INDICATIVE MOOD.

Preſent.
S. Minna om, I am. Pl. Mee omme, we are.
Sinna om, thou art. Tee oti, ye are.
Temma om, he is. Nemmat, *or* need toiſt, they are.

Imperf.
S. Minna oll, I was. Pl. Mee olme, we were.
Sinna oll, thou waſt. Tee olté, ye were.
Temma oll, he was. Nemmat, *or* need olte, they were.

Perfect
Pluſquamperf. } carent.

Future.

Future.	S. Minna lime, I ſhall or will be.	Pl. Mee lime, we ſhall or will be.
	Sinna lime, thou ſhalt or wilt be.	Tee lime, ye ſhall or will be.
	Temma line, he ſhall or will be.	Nemmat, *or* need lime, they ſhall or will be.

CONJUNCTIVE MOOD.

Pluſquamperf.	S. Minna olgſka, I ſh[d] have been.	Pl. Mee olgſka, we ſhould have been.
	Sinna olgſka, thou ſhouldſt have been.	Tee olgſka, ye ſhould have been.
	Temma olgſka, he ſhould have been.	Nemmat, *or* need olgſka, they ſhould have been.

All the other tenſes are wanting.

IMPERATIVE: Oth, be thou. Othe toi, be ye.
INFINITIVE: Olde, to be.

I have before me a collection made by the paſtor of another pariſh; but, as the reader will probably think the foregoing ſpecimen quite ſufficient, I ſhall here conclude this article.

The LIVONIANS are, by ſome inquirers into hiſtory, claſſed as a peculiar nation of Finns, while by others they are comprehended among the Eſthonians *. The annaliſts Neſtor and Henry

* Schlœtzer takes them to be the remains of the primitive inhabitants of Livonia, or a branch of the Finns; but in this caſe it muſt be preſuppoſed that the finniſh nations were once in poſſeſſion of Lettland and Courland, and were driven out by the Lettes, when only this ſmall body of Livonians remained in the country. — Friebe, (in his hiſtory of Livonia, Eſthonia, and Courland,) from their language and way of

Henry the Lette diſtinguiſh them as a ſeparate nation, and both agree in teſtifying, that in the very earlieſt periods they were among the tributary tribes to the ruſſian empire. At preſent they are only in ſmall remnants in two different places: in Courland on Angers-ſtrand, making a tract of 90 miles, where they conſiſt of about 150 families, and in detached parts of the Riga-government. As divine ſervice is now performed among the remains of this people in the lettiſh language, their own is gradually going out; and, perhaps by the end of the next century not a trace of the Livonians will be ſeen.

5. One of the moſt remarkable nations in the Finniſh hiſtory are the PERMIANS; or, as they are called in the icelandic Reports, Biarmians, who are denominated by the Ruſſians Permiaki, and whoſe preſent homeſteads are in the governments of Perme and Viætka, and in the northern diſtricts of the river Oby. It ſhould ſeem that the ſcandinavian navigators in the middle ages gave the name of Biarmia to the whole country between the White-ſea and the Ural. The Permians on the Dvina were diſcovered in the ninth

of living judges them to be real Eſthonians, who have kept themſelves unmixed among the Lettes; which may eaſily have happened from the hatred entertained by the two nations againſt each other. Their dialect is purely eſthonian with ſome ſmall mixture of lettiſh.

century

century by Other of Halgoland, a province at the extremity of Norway, and afterwards entered into the ſervice of Ælfred the great, who drew up an account of this voyage in the anglo-ſaxon language. The icelandic reports are likewiſe full of theſe people.

According to theſe Reports the Permians on the White-ſea and the parts about the Dvina were the moſt wealthy, the moſt powerful, and moſt remarkable of all the northern Finns. Here the carved image of the god Yummala had its far-famed temple *, the deſcription of the magnificence whereof borders on the marvellous, and has been evidently drawn up by a rude but warm imagination. According to theſe deſcriptions the temple was very artfully built of coſtly wood, and ſo richly ornamented with gold and precious ſtones, that it threw a radiance round the whole circumjacent country. The image of the god had on a golden crown ſet with twelve precious ſtones; a necklace, which in value amounted to 300 marks in gold, and a dreſs which outweighed the lading of three of the richeſt ſhips that navigated the grecian ſea. Laſtly, the figure bore on its knees a golden chalice, of ſuch capacity, that four men might quench their thirſt from its contents, and this

* Yummala is the univerſal deity of the Finns, as Perun was of the Slavonians and Lettes, and Othin or Odin of the Germans.

veſſel was filled with the ſame valuable metal of which its maſs conſiſted. — The report of theſe extraordinary riches it was that tempted the northern freebooters to make armed expeditions to theſe diſtant parts and to quarrel with the natives; it was conſidered too as an honourable atchievement and an heroic adventure to have brought off ſome ſpoil from this temple. From Halgoland expeditions were made thither every year; even ſeveral norwegian kings went on predatory excurſions to Permia, and uſually returned with rich booty. We alſo find that ſcandinavian mariners viſited this country for the purpoſes of trade alone, and without any piratical views.

Suppoſing theſe fabulous deſcriptions of the magnificence of Yummala's temple, and the great wealth of the country to be not entirely deſtitute of all foundation, as we may with great probability, it then merits inquiry in what manner the permian Finns accumulated ſo much gold, and how their country became the mart of a great and lucrative commerce. In very remote ages the Permians were already famous for their trade with the Perſians and Indians. Theſe nations brought their commodities over the Caſpian, up the Volga and the Kama, to Tſcherdyn, a trading town of antient date on the river Kolva; and the Permians tranſported theſe goods as well as

their own products, along the Petschora to the Frozen-ocean, where they bartered them with the people of those parts against furs for their oriental trade. — The ruins of antient towns still bear witness to the flourishing condition and the civilization of this people.

By the historical traces still subsisting, we perceive then that the Permians were the only race of the Finns who were a polished and commercial people and known to other nations, while the rest of their kindred tribes lay dormant in the deepest barbarism. — The Reports likewise speak of kings and a sort of political constitution in Biarmeland. Many of these kings, if indeed their existence were historically ascertained, seem to have been, not natives, but scandinavian corsairs, as their names also intimate. These at various times subdued as well the Finns as the Permians, and afterwards remained in these countries.

With the year 1217, the expeditions of the Norwegians to Permia cease*; at an earlier

* Nearly about the same time, though somewhat earlier, the first incursions of the Mongoles or Tartars into Russia happened. That this circumstance occasioned the scandinavian pirates to abandon their predatory expeditions to Permia is by no means probable; for, besides that a later event can never be the cause of an earlier, the depredations of the Mongoles were principally confined to the southern parts of Russia, and it is no where to be seen that they penetrated even to Novgorod, much less so far as Permia.

period, however, and probably in the eleventh and twelfth centuries, the republic of Novgorod made itſelf maſter of this country, ſending thither ruſſian colonies to keep the inhabitants in ſubjection. About the year 1372 the chriſtian faith was propagated in Permia by biſhop Stephen. At the cloſe of this, or the opening of the following century, a diſpute aroſe about the poſſeſſion of this country between the city of Novgorod and the grand-duke Vaſſilly Dmitrievitch, which at length was terminated by a compromiſe, in which it was agreed that the Novgorodians ſhould renounce all claim to it. The Permians now maintained for a length of time the liberty of chuſing their rulers from their own body. Tzar Ivan, in 1543, gave them the firſt viceroy, to whom the chief of the inhabitants were to act in a ſubordinate capacity in the affairs of government, and who had his ſeat firſt at Kolmogor, and afterwards at Archangel. — At preſent the whole of antient Biarmia, the borders whereof cannot now be accurately defined, is divided into ſeveral governments; and the deſcendants of the Permians, heretofore ſo famous, numerous, and powerful, are dwindled away to an inſignificant remainder, who, amidſt thorough Ruſſians, have loſt almoſt all their

national characteriſtics, even to their very language.

6. Near and among the Permiaki dwell the SYRIÆNES, in the diſtrict of Uſtyug-veliko, in the governments of Vologda, of Perme, and Tobolſk. Theſe people call themſelves, as well as the Permians, Komi or Komi-Murt. Their language, which they have ſtill preſerved, much reſembles the permian, and is nearly related to that of the Finns; in religion, mode of life, and manners, they have approached ſo near to the Ruſſians, that they are ſcarcely any longer diſtinguiſhable. In the fourteenth century, they, together with the Permians, were brought to the chriſtian faith.

7. The VOGULES inhabit the weſtern and ſtill in a greater degree the eaſtern part of the northern Ural, and nomadiſe chiefly about the rivers which unite with the Irtyſh and the Oby to the Frozen-ocean, or with the Kama and the Volga into the Caſpian, therefore principally in the governments of Perme and Tobolſk: they call themſelves Voguli *, and are denominated by the Ruſſians Vogulitſchi. According to their traditions, their home has always been where

* According to M. Georgi they denominate themſelves Manſi.

they

they reſide at preſent: they came under the ruſſian ſovereignty previous to the conqueſt of Siberia, at which time they were ſo brave and warlike a nation as to give the Ruſſians ſome difficulty in reducing them to their obedience. For ſome time they were thought by the latter to be the ſame people with the Oſtiaks; documents however are in being, upwards of three hundred years old, in which they are ſpecified as a diſtinct nation *. All the ſtems of the Vogules, diſperſed in various diſtricts, taken collectively, compoſe a numerous nation; but accurate ſtatements of their population are not to be had. The Vogules nomadiſing in the circle of Tſcherdyn, in the government of Perme, amounted in the year 1783 to no more than 111 perſons, compoſing nine families, and ſo nearly related

* In the Steppennaia knigi, for example, we find the following paſſage: "In the year 7007 (1), the grand-duke "Ivan Vaſſillievitch ſent his troops into the Ugorian "country againſt the Gogulitſches; and they went and "took their towns and their country, overcame their "princes, made them priſoners, and brought them to "Moſkva. The reſt of the Ugres (2), and Gogutit-"ſches (3) they ſlew, &c.

(1) 1498.

(2) Yugrians, whence the Ural and the Yugrian mountains have their name.

(3) Vogulitſches.

in conſanguinity, that they were obliged to fetch women for their wives from other races.

8. The VOTIAKS or Votes, upon the river Viætka, in the governments of Viætka and Ufa, call themſelves Ud or Udi (which ſeem to be the ſame with the ruſſian Voti), alſo Mord, i. e. Man, or Udmord. Living but little intermixed with other people, their language continues to be a pure Finniſh dialect. God is with them Yumar, and with the Finns Yummala. They have ſtill retained their old diſtribution into ſtems, and give their villages additional names accordingly; their noble families are however partly extinct and partly mingled with the populace. They were formerly under tartar protection; but on changing their old maſters for the ruſſian ſovereignty, they alſo quitted their paſtoral life for the occupations of ſettled huſbandry, and turned their tents into permanent houſes. — Their number is not inconſiderable; in the government of Ufa there are about 15,000, and in that of Viætka 30,000 males.

9. The TSCHEREMISSES dwell in the governments of Viætka, Kazan, Simbirſk, and Ufa, on both ſhores of the Volga, eſpecially the left. They call themſelves Mari, i. e. Men. Although their language be mixed with tartarian and ruſſian words, it is eaſily diſtinguiſhable as a Finniſh

niſh dialect. The Supreme Being they call Yuma. — At the time of the Tartars they were ſubject to them, and dwelt more ſouthernly between the Volga and the Don; at the downfall of the tartarian dominion they fell to the ruſſian empire, and even in this ſtate they long retained their own khans, which, however, ceaſed upon the extinction of the princely race. They were formerly a paſtoral people; but, under the ruſſian government, they are gradually become huſbandmen. The preſent amount of them is not known; they have, however, been eſtimated at 20,000.

10. The TSCHUVASCHES, who alſo denote themſelves by that appellation, are a very numerous nation, paying the tax for more than 200,000 heads. They reſide principally on both ſides of the Volga, and are in the governments of Tobolſk, Viætka, Niſhnè-novgorod, Kazan, Simbirſk, and Ufa. Their language at preſent borders more upon the tartarian that on that of the Finns; and therefore ſome hiſtorical inquirers will not even allow them to belong to that ſtock: nevertheleſs they have in their manners and cuſtoms a great ſimilarity with the generality of the Finns, particularly with the two laſt-mentioned nations, the Votiaks and Tſcheremiſſes. Theſe three tribes dwell together in villages, but never in towns; they are inured

to agriculture, and have abandoned the nomadic way of life: they are fond of horſefleſh, are moſtly heathens, have inchanters among them, and a ſort of place for divine worſhip, which they denote by the generic term Keremet. At their meetings they ſacrifice a horſe, in which their principal religious ſolemnity conſiſts.

11. The MORDVINES are by the Ruſſians called Mordva, and dwell on the Oka and Volga, in the governments of Kazan, Niſhnènovgorod, Ufa, Simbirſk, and Penſa. Though not ſo numerous as the Tſcheremiſſes and Tſchuvaſches, they are yet a very conſiderable nation, which has been found to increaſe on every ſucceſſive enumeration, and divide themſelves into two main ſtems, Mokſchan and Erſan; by which they are peculiarly named, though the general appellative of Mordva is not unuſual even among themſelves. This nation, in the opinion of ſeveral ruſſian antiquarians, is the ſame which Neſtor mentions under the names of Meres or Merænes, on occaſion of the national confederacy entered into by the five ſlavonian and finniſh tribes on the lake Ilmen for the founding of the ruſſian ſtate, and who at that time inhabited the diſtricts of Roſtof, Halitſch, Koſtroma, and Yaroſlaf *.

* See the article Ruſſians, and the note, p. 313.

12. The

12. The laſt nation of the Finns that remains for us to mention are the OSTIAKS OF THE OBY. — On the conqueſt of Siberia by the Tartars, they contemptuouſly called all the inhabitants of this extenſive country, of which, however, they knew but a ſmall part, Uſchtyæk, a word denoting a foreigner or barbarian. This denomination was at firſt retained by the Ruſſians from ignorance, and has ſince been loſt in proportion as the diverſity of the ſiberian nations have been detected. However there remain at preſent three very diſtinct people both in deſcent and language, the Oſtiaks of the Oby, of the Narym, and of the Yeniſſey. Only the firſt of theſe three tribes belong to the ſtock of Finns. — The Oſtiaks of the ſouthern Oby call themſelves Aſyaks of the river Oby, which in their language is called Yak; the northern, Khondi Khui, people of Konda, becauſe they withdrew from that river towards the north. Both ſtems dwell at preſent about the Oby and the Irtyſh, in the government of Tobolſk, and derive their origin from the Permians *, from whom they probably ſeparated to avoid biſhop Stephen's barbarous zeal for making converts. If this derivation were as certain as it is pro-

* Their language comes neareſt to the permian, and next to that to the vogule.

bable,

bable, from the ſimilitude of the languages, they muſt ſurely have had ſome weighty motive for quitting their mild and gentle ſky on the weſt ſide of the Ural for the inclement regions of the Oby. — The Oſtiaks of the Oby are held to be one of the moſt numerous of the ſiberian nations, but accurate ſtatements of their population are not known.

From the generality of theſe nations of Finns, but eſpecially from the Tſcheremiſſes, the Tſchuvaſches, and the Votiaks, a mongrel horde has ariſen, which has been increaſed by Tartars, and at preſent may be regarded as a peculiar tribe. The Ruſſians have given them the name of TEPTERI, a word originally tartarian, and denoting a man who cannot pay his taxes. The Tepteri were formed in the middle of the ſixteenth century, during the diſſolution of the kazan-tartarian empire, and eſtabliſhed themſelves at firſt in that part of the Ural-mountains which belongs to the government of Ufa. At preſent they are ſo much intermingled that their origin is ſcarcely diſcernible. They are found to be more numerous at every ſucceeding cenſus; in the year 1762 about 34,000 of them paid the impoſts.

BEFORE we take our final leave of the Finns, we ſhall here ſubjoin a few particulars relating to the converſions in Livonia, from the chronicle of Henry the Lette.

Moſt of the converſions from heatheniſm in the fourth and fifth centuries were undertaken by fanaticiſm and the luſt of dominion; were carried on under a total ignorance of the human heart, by means of impoſture, pious frauds, artifice, and violence, ſupported in their courſe by ſuperſtition, intolerance, and ſelf-intereſt, and finally terminated in a tyrannical ſubjugation of the underſtanding and will, and in the uſurpation of the property of the individual. With this reſemblance on the whole, the ſeveral nations and ages in which they were tranſacted have had their variations. Sometimes perſuaſion was more employed, ſometimes deceit ſucceeded better, and ſometimes tortures and murders were found moſt beneficial. The hiſtory of Livonia unites all theſe methods in one ſtriking picture. Scarcely any means were left unemployed. A diverſity which will be very comprehenſible when we ſee what a difference there was in the converters in regard to rank, talents, authority, views, and abilities; and at the ſame time take into contemplation the qualities of the heathens who were to be converted.

The

The firſt dawn of chriſtianity in Livonia promiſed a lighter, warmer, and more productive day than that which actually enſued. About twenty years had elapſed ſince the merchants of lower Saxony had diſcovered the mouth of the Dvina, and employed it in the purpoſes of commerce, when their factory became ſo numerous as to require a religious teacher. This teacher was Meinhard, an old monk of the monaſtery of Segeberg in Holſtein. The time of his arrival in the country is not aſcertained. Some pretend that it was in 1170, others in 1186. Probably his coming was chiefly on account of the heathens; but, not prematurely to betray his deſign, he confined himſelf at firſt to his little german congregation. During this time he was learning the language of the country; and, thinking himſelf ſufficiently ſtrong in it, he requeſted permiſſion of the ruſſian prince Vladimir at Pſcove, to preach chriſtianity to them. Whereby we ſee that the worthy old man connected caution with his zeal, two properties not always found together; pity that his perceptions in religion were only the perceptions of the age in which he lived: extremely weak, undigeſted, and confined. It is therefore to be lamented, but not to be wondered at, that he, as was cuſtomary at that time, baptized without inſtructing.

ing. A weak ill-founded edifice cannot poſſibly ſtand long. Nevertheleſs, Meinhard's labours were attended with ſucceſs. A ſervice which he rendered to his new countrymen in a civil capacity contributed not a little to it: he repulſed the Lithuanians who had made an incurſion upon them. Profiting by this event, he laid before them the neceſſity of having a ſtrong fortreſs; they were convinced by his arguments: and he promiſed it them on condition that they would allow themſelves to be baptized. Meinhard cauſed builders and materials to be brought from Gothland; and for defraying the expence obtained an eſtate in land. The fortreſs Ykeſkola, now called Uexkull, was finiſhed; but when the natives had got what they wiſhed, they would hear nothing farther of chriſtianity. The greater part had promiſed to ſubmit to baptiſm when the building ſhould be completed; theſe flew from their word: many had been previouſly baptized, and even the majority of them relapſed. Their neighbours alſo in the preſent Kirchholm cheated the good prieſt. They too promiſed to become chriſtians, if he would but build them a caſtle, and they likewiſe forfeited their word. The people of Kirchholm proceeded ſtill farther: they plundered Meinhard of what he had, and maltreated his people.

That

That he was in the mean time appointed bishop was not a sufficient consolation to him. He therefore determined to return with his clergy to Germany. The Livonians more than once detained him from putting his design in execution; one while by entreaties, at another by menaces and actual violence, and yet they did all that lay in their power to render his stay uncomfortable. Deceived in his fairest hopes, exposed to a variety of insults, and surrounded by still greater perils, Meinhard passed a few uneasy years longer among them, and died more of grief than of age. A man worthy of a better fate.

Whether accident or artifice on one hand, and pious credulity on the other, had the greater share in producing them, it is not now to be ascertained, but the Livonians also have MIRACLES to shew in the history of their conversion. The monk Diederik of Thoreyda was one of Meinhard's most active assistants. He baptized beyond the Aa. From envy at the fertility of his fields, the Esthonians wanted to sacrifice him. In order that they might learn the will of their deities on the subject, they began their usual experiment with a sacred horse, by remarking which foot he set foremost on beginning to walk; on this occasion he moved the left

left foot firſt, it was therefore the will of the gods that Diederik ſhould not be ſacrificed. But the Eſthonian prieſts were of opinion that the God of the chriſtians ſeated himſelf on the back of the horſe, and forced him to ſet that foot foremoſt. The horſe muſt therefore be rubbed down in order to bruſh off the deity to the ground; and the ſolemnity was renewed. Again the left foot! Diederik was now abſolved. — A Livonian who had a wound beſought the monk to heal him, on condition of being baptized. Without knowing any thing of the art of medicine, the converter mingled ſome herbs together, to which he hoped to impart a healing efficacy by his prayers; the patient in fact recovered, and became a chriſtian. — Another, at the point of death, thought by baptiſm alone to be reſtored to health. His family and friends conceived that price too high, and nothing but the moſt manifeſt peril of death at laſt made their obſtinacy yield. However, the proſelyte died. So much the worſe! we are ready to exclaim. But no: ſo much the better! Another new convert, who was 42 miles from the place, ſaw the ſoul of the deceaſed borne by angels to heaven: a circumſtance which had a better effect upon them who believed it than the recovery of a patient.

It was this Diederik whom bishop Meinhard sent to Germany to preserve the remains of christianity by all possible means against the heathen, were it even by force of arms. Their ill-treatment of the pious bishop had compelled him to this measure. Thus, by insincerity, artifice, and thirst of blood, they drew the sword from the scabbard which afterwards chastised them in so dreadful a manner.

In Meinhard's place, Berthold, abbot of the monastery of Lockum in Hanover, was elected bishop. He had Meinhard's caution without his zeal; it was, therefore, no wonder, that in the present state of things he hesitated to go into Livonia. But the archbishop of Bremen, to whom the new congregation had applied, persuaded him to take the journey. Accordingly, he arrived in the year 1197, and strove to recommend himself to the natives by qualities which they valued most. He gave them frequent entertainments, and on all such occasions sent them home with presents. He therefore met with a civil reception. But only for a short time. Affronts were very soon followed by outrages. He was reproached with having come merely on account of his poverty. Perhaps he was too precipitate in demanding the interest on this out-lying capital of the entertainments.

Matters

Matters proceeded so far, that at the consecration of the church-yard of Kirchholm, the Livonians threatened to stab, or drown, or burn him. Perhaps it was owing solely to this indecision on the mode of his death that he happily escaped. He found it however not advisable to remain here any longer. He left Livonia; and we should have pitied him if he had been obliged to this step for the sake of being at rest; but he did it out of malice. He applied to Gothland and to Lower Saxony for succour. The pope afforded him the most effectual by causing a crusade to be preached against the heathens in Livonia. In consequence whereof a great number of sinners, desirous of meriting indulgences by murders, flocked to his standard, and Berthold, in 1198, returned to Livonia with soldiers. According to the unhappy notions that prevailed at that time, the field of religion, which can only be fertilized by cordial zeal and diligence in instruction, was to be fattened with blood. From such methods nought but thorns and thistles can grow. The sight of an armed host did not produce among the heathens and heretics what was probably expected. Prepared to fight, they went to meet the invaders. They sent deputies to the bishop with the question, why he was

come with ſoldiers? Berthold anſwered, to puniſh them for their ſhameful lapſe from the chriſtianity which they had adopted. The natives replied, let him ſend away his warriors, and exerciſe his office in peace; thoſe who have ſuffered themſelves to be baptized, may by his remonſtrances be preſerved in chriſtianity; the reſt he may convert by words, not by blows. A reply which ought to have put the chriſtians to ſhame; but it cannot be mentioned to the honour of the Livonians. This was only a new eſſay of their artful inſincerity, in their eagerneſs to get the ſoldiers away, as appeared in the ſequel. A truce was concluded, but the heathens ſoon broke it by the aſſaſſination of ſeveral Germans. Berthold declared war, and a bloody battle enſued. The firſt who had attempted to make chriſtians in Livonia by the ſword, was the firſt who fell by the ſword; the biſhop on horſeback ruſhed into the throng, was ſtabbed, and cut to pieces. The enemy, however, had been previouſly thrown into diſorder, and were now more furiouſly purſued by the enraged ſoldiers. And thus the very loſs of the chief contributed to the great increaſe of the congregation. The heathens being entirely routed, and even their corn-fields laid waſte by the chriſtians, now ſued

for

for peace, admitted prieſts into the forts, promiſed them from each haak * a meaſure of wheat, and flocked in ſuch numbers to be baptized, that in two days in Uexkull and Kirchholm 150 chriſtians — were *named*. This done, the German ſoldiers to a man were embarked on board the merchant ſhips, and returned home. Scarcely were the ſhips at ſea, but the Livonians ran and bathed in the Dvina; in order, as they ſaid, to waſh away the baptiſm and chriſtianity together, and ſend it back to Saxony. They found a human head cut out in a tree. In the opinion that this was the god of the Saxons, who might probably ſtill do them much miſchief, they hewed it in pieces, made a particular kind of float of the fragments, and ſet it ſwimming on the ſea towards Gothland. They alſo robbed and plundered all that remained behind, and put upwards

* Haaks, hakes, or hacks, (for it is written theſe ſeveral ways,) is the land-meaſure for aſcertaining the dimenſions of an eſtate and its taxes to the crown. An eſtate of two haaks may be more productive than another of five. In Eſthonia the labouring people upon the eſtate, but in Livonia the cultivated ground and its product, determine the number of haaks. Grounds that were formerly tilled and uſed, as ſuch were enregiſtered at the reviſion, but for want of people now lie unlaboured, are called waſte haaks; from which no taxes are demanded. In regard to ſuch it is ſaid, the eſtates can never increaſe its number of haaks.

of 200 to death. It is eaſy to imagine that the clergy, of whom ſeveral had come hither at various times, muſt be thrown into great diſtreſs; but the dangers of their ſituation were increaſed when the Livonians expreſsly reſolved, that all prieſts who ſhould be found in the country after Eaſter 1199, ſhould be ſlain. A ſimilar fate awaited the merchants. Theſe ranſomed their lives with money; but the clergy were forced to fly to Lower Saxony. Chriſtianity in Livonia now ſeemed to be verging to its total overthrow, and juſt at this point of time appeared the man who eſtabliſhed it on a firm foundation; indeed on ſwords, fortifications, and chains of bondage — he, however, eſtabliſhed it. There came the armed apoſtle Albrecht of Apelderen, afterwards canon of Bremen, now biſhop of Livonia: and it muſt be confeſſed that the livonian heathens deſerved ſuch a one much more than many other nations who were haraſſed into chriſtians.

The monk Meinhard, and the abbot Berthold, were principally bent upon baptiſm. Albrecht the nobleman and the canon was more reſolved upon governing than converting the Livonians. As ſoon as he was elected biſhop, he made it his buſineſs to procure effectual ſupport in Gothland, Denmark, and Germany, and obtained it ſo richly, that in autumn 1199, he arrived in

Livonia

Livonia with 23 ships. At first he was not successful; but now the burning of the corn-fields had again its effect: that is, the Livonians became christians for fear of starving. They confirmed their fidelity by hostages, which were obtained by inviting the chieftains to a feast, and then seizing and conveying them to prison. The pope had hitherto been very active in the propagation of christianity in Livonia, by a general summons to make war upon the heathen; he now made a merit of adding good counsel. He issued a bull, in which he recommended the converters to use gentleness and lenity towards the baptized, even at the expence of the true discipline of the church. And indeed the conduct of the clergy in Livonia at that time redounds infinitely more to their honour than elsewhere. It was, properly speaking, the temporal arm that riveted the fetters of slavery on the natives, and, in the sequel, made even the clergy feel the weight of its iron hand. True, it was the clergy themselves that armed it, when the bishop, in the year 1201 or 1202, founded the order of the teutonic-knights, and procured its confirmation by the pope. Their destination was to support the bishop in converting the infidels; their constitution was one and the same with that of the knights-templars. For the times, principles, and exigencies of Albrecht,

the inſtitution of ſuch an order was no bad conceit. Indeed he made an annual journey to Germany to fetch pilgrims; but when theſe had been robbing and plundering for a year to the glory of God, they were abſolved from their vow, and went back to Germany. Whereas Albrecht employed valiant men from whom the biſhopric might expect continual protection. For which reaſon he gave ample fiefs to ſome courageous nobles. But having not many of theſe at his diſpoſal, he fell upon the thought of forming about him a ſort of ſtanding army; and this purpoſe he effected by the new order. He alſo deviſed other methods for farther confirming chriſtianity in the country, in temporals as well as in ſpirituals. In the year 1201 the biſhop built the city of Riga, the conſequences whereof the heathen plainly ſaw, but they endeavoured in vain to prevent it. Hitherto the cathedral chapter was at Uexkull; Albrecht now transferred it to his new city, where he alſo built a monaſtery. Another monaſtery was alſo conſtructed at the mouth of the Dvina. The clergy diſperſed themſelves in all the country round, in order to teach and to baptize.

Of the methods employed in teaching, hiſtory mentions only one. It is curious enough, but certainly not the worſt of thoſe times. The dramatical

dramatical annals of any nation can ſcarcely ſhew a theatrical college of ſuch remote antiquity as that of Riga. At Riga in 1204 was acted a prophetic-play, that is, a dramatized extract from the hiſtory of the old and new teſtaments. The deſign was by this means to allure the heathen to the adoption of chriſtianity, partly by attaching the converts to their new religion by ſenſible gratification, and partly to inſtruct them in the hiſtory of it. The Livonians, baptized and unbaptized, reſorted to it in multitudes, and they were informed of the contents by an interpreter. The piece was probably in latin; in pretty much the ſame taſte as the biblical plays that were cuſtomary in England, France, and Germany, in the ſixteenth and even the ſeventeenth century. The number of the performers muſt have been very great, (perhaps it conſiſted of the whole order together with the chapter,) as battles and wars were repreſented, for inſtance from the hiſtory of Gideon, David, and Herod. The firſt exhibition, however, was like to have been attended by very ſerious conſequences. When the Iſraelites under Gideon's command were fighting at cloſe quarters with the Midianites, the heathens took it into their heads that the armed troops were brought in under this pretence, in order to fall upon them. They, therefore, fought their

ſafety in flight. Their miſtake, however, being explained to them, they were perſuaded to return, and the play was brought to a happy concluſion.

It is not the hiſtorian's fault if the ſeveral groups of this picture ſtand rather wide aſunder. The laſt ſcene was a biblical comedy. Now follow martyrs.

Our annaliſt * is as laviſh of this venerable name as the fathers of the church, and therefore is not always careful to beſtow it according to merit. A couple of inconſiderate proſelytes ventured, notwithſtanding the remonſtrances of the german commanders, to go into the meeting of their heatheniſh brethren in order to hear their conſultations; they were laid hold on and methods adopted to force them to abjure chriſtianity: they remained firm, and the conſequence was that they were killed. The annaliſt calls them martyrs. If, in the inceſſant conflicts with the neighbouring heathens, ſome of the baptized were taken priſoners, and, for the cruelties they had uſed, were cruelly put to death, they are ſtyled martyrs. If pilgrims, who came to Livonia for the purpoſes of robbery and murder, met their deaths in a combat with the heathens,

* Henry the Lette, Livonian Chronicle, publiſhed by Arndt, part i.

they

they are denominated martyrs. There were, however, really ſome who deſerved that appellation. Some prieſts who lived among the new-converts were clandeſtinely attacked and murdered without accuſation. But with people who themſelves are hardened to the higheſt degree againſt all ſorts of torture, the ſight of intrepid ſufferers made no great impreſſion. The buſineſs of converſion, therefore, in Livonia was not ſo much benefited by martyrs as it was in luxurious Aſia, and Italy under the heathen emperors.

In the year 1205 Andrew archbiſhop of Lunden, on his return from an unſucceſsful cruſade to the iſle of Œſel, came to Riga, where he paſſed the winter. Henry the Lette relates many good deeds which he performed; we may reaſonably believe that alſo many of the events that afterwards happened, without being aſcribed to his merit, were of his doing. Andrew, by having proſecuted his ſtudies in Italy, France, and England, was a very learned divine, and now made in Riga an excellent uſe of the knowledge he had acquired. He gave lectures in theology to the clergy of that city, expounded the pſalter, and exerciſed them in aſcetic practices. By his advice the vicar of the biſhop of Riga, in return for hoſtages received, ſent prieſts among

among the Livonians, divided the country into distinct parishes, and caused them to be not merely baptized, but previously instructed. To secure his institutions churches were built. Among the popular teachers a certain Alobrand particularly distinguished himself by zeal, activity, and prudence. The confidence placed in him by his congregation was so great that they appointed him their judge even in temporal matters. If the connection of the civil authority with the priesthood be in general an impediment to the progress of mental improvement, it is certainly beneficial among a rude people. Had all priests been like Alobrand they would not so soon have forced the laity to take the seat of judgment. But by the oppressions of rapacious adventurers this practice very quickly degenerated into an obstacle to conversions.

Notwithstanding this better regulation, contrary means and accidental circumstances made more christians than instruction. The Germans fitted out an expedition against Selburg beyond the Dvina. The fortress was surrounded, the besieged were harassed on all sides by the attacks of the enemy; at length the christians set fire to the town. On this the Selens from desperation capitulated with the christians. One of the missionaries came to the Lettgallians in

the diſtrict of the preſent Valk. The hiſtorian honeſtly relates that they had adopted chriſtianity, becauſe they reckoned on the protection of the Germans againſt the oppreſſions of their neighbours. But at the ſame time the ruſſian converter had appeared in the diſtrict. Doubtful to which party of religion they ſhould give their aſſent, the former pitched upon a method which was ſtill more ambiguous than their motive. The lot was to decide. It fell in favour of the Germans; and thus the congregation of Riga acquired a new increaſe of converts. In another inſtance the matter ſtopped ſhort at the intention; but, as an addition to the hiſtory of rude uncultivated man, it ought not to be paſſed over. The Eſthonians were beſieging a town which was defended by converted Lettes. While the enemy were carrying on the attack, and the garriſon were endeavouring to repulſe them, the prieſt of the citadel had the courage to get up on one of the higheſt ramparts, and with a muſical inſtrument to accompany a religious hymn. The heathens were ſo ſurpriſed at a melody which they had never heard before, that they ſuddenly refrained from the attack, and inquired the occaſion of it. The Lettes returned for anſwer that it was the expreſſion of joy at the happineſs ariſing from baptiſm, and on account of the

the visible assistance of God in the combat. (They had actually gained some advantage.) Hereupon the Esthonians made offers of an accommodation. But, as the restitution of merchandize that had been carried off to a great amount was made an absolute condition of the treaty, the consideration of so great a surrender effaced the transient impression of that occurrence, and they contented themselves with raising the siege. In short the business of conversion among the Lettes went on so prosperously, that they were all baptized to the number of 1209.

Far more slow was the progress of christianity in Esthonia. Before the appearance of Meinhard a certain Fulco had received the commission to labour at the conversion of the Finns and Esthonians. He was succeeded by another likewise appointed by the Swedes; still, however, little was done. Perhaps it was because conversion was the sole concern; and that, with so robust and stubborn a people, could not possibly proceed so rapidly as among the more pliant Lettes. Albert adopted a different method; he resolved first to conquer Esthonia and then to make converts. He went so zealously to work, that in 1210 he ordained a bishop even before he had a diocese to give him.

Christ-

Chriſtianity, however, was gaining ground, but not a foot in breadth that was not manured with blood; frequently ſo thick that even the furious zealots themſelves, though hardened by the practice of the times, ſtood aghaſt at the ſight, and ſeemed to relent. Thus, in the year 1210 the burg of Viliende (Fellin) was brought to ſubmiſſion by compromiſe. The fortreſs was full of dead bodies, and the remainder of the garriſon diſabled by wounds. The firſt thing the conquerors did was only to ſprinkle them all with holy water, and then proceeded to inſtruct the heathen in the firſt rudiments of chriſtianity. At other times they uſed firſt to baptize; for this once, however, they deferred it a little, becauſe, ſays the annaliſt, too much blood had been ſhed. Leal was converted by fire. The outworks had been previouſly burnt by the Germans; the beſieged endeavoured to move the enemy to retire by an offer of money: but this they rejected, at the ſame time aſſuring them, that they wiſhed for nothing more than that they would allow themſelves to be baptized, that they might be reconciled with the great Pacificator, and become their brethren as well in the preſent as in the future world. The Eſthonians ſtill held out; but the fire was ſpreading far and wide; and, in order not to be burned,

burned, they requeſted to be baptized. Was it ſurpriſing, that ſuch proſelytes adhered to the faith no longer than till the apoſtolic incendiary had quitted their borders?

But I am weary of purſuing my ſubject, and if any one ſhould cenſure me for it I envy him not his feelings. — Therefore only a few traits more, as being eminently characteriſtic.

Ungannia (the diſtrict of Dorpat) and Saccala (the country round Fellin) were in 1214 brought to chriſtianity. Rotalia (the Strandvyck) was likewiſe to be compelled to adopt it, and the Germans were beſieging a ſtrong caſtle in that diſtrict. After a brave reſiſtance the Eſthonians were forced to ſurrender for want of proviſions and water. This they did on the uſual terms of ſubmitting to baptiſm. Twenty days afterwards a prieſt was ſent to them. Concerning any previous inſtruction we find nothing recorded. He merely aſked, Will ye renounce idolatry and believe in the only God of the chriſtians? They anſwered, Yes. On which he poured water on them, ſaying the words: Ye are therefore baptized in the name of the father, the ſon, and the holy-ghoſt. With this the whole of the grand buſineſs ended.

Better regulations however were ſoon adopted in behalf of the Eſthonians. The biſhop of Riga

in

in the year 1219 ſent prieſts into many of the provinces, who at leaſt took ſome pains in inſtructing before they adminiſtered baptiſm; it is nevertheleſs plain from the precipitancy with which theſe converters proceeded in their labours, that the inſtruction could not poſſibly be adequate and ſufficient.

Henceforward chriſtianity made rapid progreſs in Eſthonia. Alas, it did! and never was it more clearly manifeſt with what ſpirit the converters were animated than at this period. Chriſtianity furniſhed merely the pretext, all their induſtry and abilities were directed by the thirſt of dominion. The Swedes made themſelves maſters of a part of Strandvyck, and to retain them as ſubjects made them chriſtians. But in an attack made by the Œſelers their whole army was cut off, and for the preſent they abandoned the enterpriſe. The Danes, who were in poſſeſſion of the province of Reval, diſputed the right of the people of Riga to baptize in Eſthonia, pretending that they alone had the right of dominion there; the two rights being at that time the ſame. This ſpecies of rivalſhip was unworthy of chriſtianity; but ſtill more were the ſhocking ſcenes which it occaſioned. The Danes ſent into the heathen villages, whither their baptiſts could not immediately come,

come, large wooden croſſes: the erection whereof was for the purpoſe of informing the people of Riga that theſe places were already in occupancy. They proceeded ſtill farther. The Riga prieſts came once into an eſthonian village, to whom the elderman ſaid, Here all are already baptized. Probably the prieſts knew that the Danes could not yet have been here, and therefore aſked, How? and by whom? "Yes, anſwered the "Eſthonian, ſome of our people were in a "village, where the daniſh prieſt happened to "be; there he baptized us, and gave us conſe-"crated water to take home, that we might "here baptize ourſelves. Accordingly we "have ſprinkled our wives and children with it, "and what need is there then of a new bap-"tiſm?" Certainly, what need of a new one? but in the circumſtances which the new converts exhibited, why even the firſt? The manner of proceeding was in this inſtance only abſurd; the Danes in other places carried it to a criminal act. It may be preſumed that the reader will be glad to know how. The Danes hanged an elderman of Vierland for having cauſed himſelf to be baptized by the men of Riga, and given them his ſon as a hoſtage. An accommodation, indeed, was entered into between the Germans and the Danes, whereby the latter renounced the

paramount

paramount lordſhip over Eſthonia, which had been conquered by the knights: yet tranquillity was of no longer duration, than while one party or the other felt itſelf too weak for beginning the attack. When they had once found a fit opportunity their reciprocal feuds were recommenced. A papal legate who came to Riga in 1225, and gained great reputation by his manner of treating the new converts, took all poſſible pains to reconcile the contending parties: but always without any laſting effect. On the contrary, his preſence was the innocent occaſion of freſh acts of baſeneſs in the Danes. For as ſoon as he was gone, they ſet up an impoſtor as legate from the pope, who formally put the knights under a bann, and employed the zeal of the new converts in behalf of the church, to incite them to exterminate their converters. Theſe contentions laſted till towards the middle of the thirteenth century. Livonia and Eſthonia were baptized, even Œſel, by the campaign of 1227, was brought under the yoke of the chriſtians, and at the middle of that century there were only in Courland a few nominal heathens; in reality indeed there were infinitely more. Five biſhoprics were at that time in the new-converted provinces; Riga, Dorpat, Œſel, Selburg, and Reval.

Considering the whole of this business of conversion, are we to be surprised at the frequent relapses of those who had been baptized? And is it any wonder that a building constructed on so weak a foundation should, even after so many centuries are elapsed, discover no traces of its origin? That these provinces were in the sequel almost uninterruptedly ravaged by bloody wars, domestic and foreign, that the natives in various parts still sigh under an oppression, of which it is thought a sufficient justification to say that it is not equal to the negro slavery; that many a man is made a teacher of a congregation, who scarcely understands the first elements of the language of his people: — all this, and much more contribute greatly to the deplorable appearance, of which of late some honest and enlightened preachers of these provinces have publicly complained: but it is no less certain that it is greatly owing to the methods taken for converting our heathen at the beginning of the thirteenth century, that still at the close of the eighteenth so many remains of paganism are found among the Lettes and Esthonians *.

Of

* Das Russische reich, oder merkwurdigkeiten aus der geschichte, geographie und naturkunde aller der lænder, die jetzt zur russischen monarchie gehœren, von Karl Gottlob Sonntag, oberpastor an der Jacob's kirche zu Riga, tom. i. p. 73.

Of the Finlanders, Eſthonians, or Æſtiers, together with all the ſlavonian tribes, in thoſe times known only by the appellation of Sauromates, or northern Medes, of which nation they either were or pretended to be the deſcendants, as alſo of the Goths, the Romans ſcarcely knew any thing but the names. Norway (*Nerigon*), Sconen (*Scandia*), *Dunney*, and *Værœ* were, according to them, iſlands lying near the Frozen-ocean, as well as Thule, whither they uſed to ſail from Norway, as well as from the northernmoſt point of Scotland. Theſe obſcure notions of the Romans reſpecting the geography of the northern nations are conſequently alſo very incoherent, and of no manner of uſe. — Pliny expreſſes himſelf thus: Sunt qui et alias (inſulas) prodant, Scandiam, Dumnam, Bergos; maximamque omnium Nerigon, ex qua in Thulen navigetur. A Thule unius diei navigatione,

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p. 73, & ſqq. p. 267, & ſqq. It was thought unneceſſary to quote the various authorities for each particular. The moſt credible voucher for the tranſactions of thoſe times is undoubtedly Henry the Lette. Arndt's chronicle, part i. p. 1—45. Hiærne has made uſe of them; Kelch and Ruſſof relate the circumſtances more fully, but their ſources are not always to be relied on. Gadebuſch gives the reſult of the hiſtorical critiques on the productions of this period. Livonian year-books, part i. ſect. i. p. 13—43.

mare

mare concretum, a nonnullis Cronium appellatum. Lib. iv. cap. 16. It is evident, says Mr. Reinhold Forster, that the whole coast is meant here; and though the learned Schlœtzer, whose information on these points is universally respected, in his "Introduction to the universal history of the north," an excellent work, chooses to understand by Bergos one of the two sons of Hercules mentioned by Pomponius Mela, viz. Albion and Bergion, who gave the names of Albion and Bergion (or Ουερνα, Juverna, Hibernia) to the british islands; yet I cannot persuade myself to take it in this light, as it seems more probable to me that the appellations of Dumna and Bergos belonged to the islands Dumnæ or Dumney near Halgoland, and Vœrœ near Malstrom, for the continued series in which these countries are disposed seems to render this supposition in a manner necessary. For the same reason, I should never think of looking for Thule in Iceland, but rather in Shetland.

END OF THE FIRST VOLUME.

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